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THE ESTIMATED COST FOR THIS REQUEST IS 542.36 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L8 ANSWER 1 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:142123 CAPLUS

DOCUMENT NUMBER: 154:170452

TITLE: Organic electroluminescent element

INVENTOR(S): Ise, Toshihiro; Kitamura, Tetsu; Watanabe, Toru;

Takeda, Akira; Tonosaki, Keiju

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 128pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.				KIND DATE			APPLICATION NO.						DATE			
WO	2011	 0137:	83		A1	_	20110203			WO 2	010-	 JP62	 859		2	0100	 729
	W:	ΑE,	AG,	AL,	ΑM,	AO,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MΖ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		TH,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW
	RW:	AL,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,
		HU,	ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,
		SI,	SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	ΤG,	BW,	GH,	GM,	ΚE,	LR,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,
		TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM			
PRIORITY	APP	LN.	INFO	. :						JP 2	009-	1802	23		A 2	0090	731
										JP 2	009-	2011	55		A 2	0090	831
										JP 2	009-	2216	63		A 2	0090	925

Disclosed is an organic electroluminescent element having excellent light emission characteristics and excellent durability, wherein chromaticity change is suppressed when the organic electroluminescent element is driven at high temps. The organic electroluminescent element comprises, on a substrate, a pair of electrodes and a light-emitting layer arranged between the electrodes, and was characterized in that the light-emitting layer contains a compound (Cz)p-L-(A)q [Cz = (un)substituted arylcarbazolyl or carbazolylaryl; L = single bond, (un)substituted arylene, cycloalkylene or aromatic heterocycle; A = (un)substituted N-containing six-membered aromatic heterocycle; p, q = integer of 1-6] and a specific metal complex.

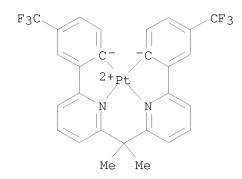
IT 881887-26-9 881887-28-1

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent element)

RN 881887-26-9 CAPLUS

RN 881887-28-1 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:142036 CAPLUS

DOCUMENT NUMBER: 154:220813

TITLE: Organic electroluminescent element and method for

manufacturing same

INVENTOR(S): Masui, Kensuke; Sugiyama, Takeo; Kawato, Koji

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 53pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT NO.					KIND DATE		APPLICATION NO.						DATE				
						_									_		
WO 2011013628				A1	A1 20110203			,	WO 2	010-	JP62	541		20100726			
	W:	ΑE,	AG,	AL,	ΑM,	ΑO,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		TH,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW
	RW:	AL,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,

HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ,

TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

JP 4598137 B1 20101215 JP 2009-180204 20090731 JP 2011035172 A 20110217

PRIORITY APPLN. INFO.: JP 2009-180204 A 20090731

AB Disclosed is an organic electroluminescent element which was characterized by comprising a light-emitting layer that has a Raman peak within the range of 800 - 1,283 cm-1. The organic electroluminescent element is also characterized in that the wavenumber difference between the maximum Raman peak of the light-emitting layer as determined as a layer and the Raman peak of the material that forms the light-emitting layer as determined as a crystal is 2 cm-1 at the maximum

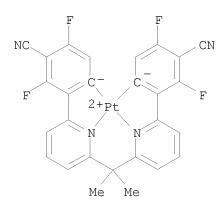
IT 1256953-03-3

RL: TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent element and method for manufacturing same)

RN 1256953-03-3 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-3,5-difluoro-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:142025 CAPLUS

DOCUMENT NUMBER: 154:220812

TITLE: Vapor deposition material for organic device and

method for manufacturing organic device

INVENTOR(S): Hayashi, Masayuki

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 48pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
WO 2011013626	A1	20110203	WO 2010-JP62538	20100726		
W: AE, AG,	AL, AM, AO	, AT, AU,	AZ, BA, BB, BG, BH, BR,	BW, BY, BZ,		
CA, CH,	CL, CN, CO	, CR, CU,	CZ, DE, DK, DM, DO, DZ,	EC, EE, EG,		
ES, FI,	GB, GD, GE	, GH, GM,	GT, HN, HR, HU, ID, IL,	IN, IS, KE,		

KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM PRIORITY APPLN. INFO::

JP 2009-179957
A 20090731
JP 2009-219311
A 20090924

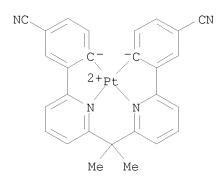
AB Disclosed is a vapor deposition material which is used for the production of an organic device. The vapor deposition material for an organic device has an average particle diameter expressed as D50% of 10-200 μm and a uniformity degree expressed as D60% diameter/D10% diameter of 1.0-4.0.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (vapor deposition material for organic device)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:139719 CAPLUS

DOCUMENT NUMBER: 154:170449

TITLE: Organic electroluminescent element

INVENTOR(S): Kitamura, Tetsu; Watanabe, Toru; Hayashi, Masayuki;

Ise, Toshihiro

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 121pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND DAT	ΓE APP	LICATION NO.	DATE
WO 2011013830	A1 201	110203 WO	2010-JP62961	20100730
W: AE, AG,	AL, AM, AO, AT	Γ, AU, AZ, BA	, BB, BG, BH,	BR, BW, BY, BZ,
CA, CH,	CL, CN, CO, CR	R, CU, CZ, DE	, DK, DM, DO,	DZ, EC, EE, EG,
ES, FI,	GB, GD, GE, GH	H, GM, GT, HN	, HR, HU, ID,	IL, IN, IS, JP,
KE, KG,	KM, KN, KP, KR	R, KZ, LA, LC	, LK, LR, LS,	LT, LU, LY, MA,

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MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM PRIORITY APPLN. INFO::

JP 2009-201157 A 20090831
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GI

Disclosed is an organic electroluminescent element which is able to be driven at low voltage and exhibits high efficiency and excellent durability, while having small chromaticity change when driven at high temps. The organic electroluminescent element comprises, on a substrate, a pair of electrodes and at least one organic layer arranged between the electrodes and including a light-emitting layer, and was characterized in that one organic layer contains a compound (Cz)p-L-(A)q [Cz = (un)substituted arylcarbazolyl or carbazolylaryl; L = single bond, (un)substituted arylene, cycloalkylene or aromatic heterocycle; A = (un)substituted N-containing six-membered aromatic heterocycle; p, q = integer of 1 - 6.] and the light-emitting layer contains a phosphorescent material I [Q1-4 = ligand coordinated to Pt; L1-3 = single bond or divalent linking group].

IT 881887-26-9 1227925-61-2 1234267-56-1
RL: TEM (Technical or engineered material use); USES (Uses)
(organic electroluminescent element)

RN 881887-26-9 CAPLUS

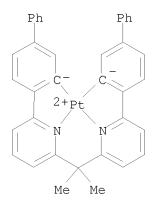
CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1227925-61-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)[1,1'-biphenyl]-3,4-diyl- κ C4]]-, (SP-4-2)- (CA INDEX NAME)

RN 1234267-56-1 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)[1,1'-biphenyl]-4,3-diyl- κ C3]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2011:100519 CAPLUS

DOCUMENT NUMBER: 154:196969

TITLE: Organic electroluminescence components

INVENTOR(S): Masui, Kensuke; Toyama, Wataru PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Tokkyo Koho, 49pp.

CODEN: JTXXFF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
JP 4620802	В1	20110126	JP 2010-181403		20100813
PRIORITY APPLN. INFO.:			JP 2010-9813	Α	20100120

AB The title organic electroluminescence component comprises a 1st/2nd/3rd organic laminate bound between an anode and a cathode, wherein (1) the 1st organic layer contains 10-90 weight% 1st host material and 10-90 weight% 1st hole transport phosphorescent material and (2) the 2nd organic layer contains 65-96.9 weight% 2nd host material, 3-30 weight% 2nd hole transport phosphorescent material, and 0.1-5 weight% electron trap material. The 2nd host material, 2nd hole transport phosphorescent material, and the

electron trap material have relationships indicated below; |HOMOt2|>|HOMOt2|>|HOMOt2|>|HOMOp2|, |LUMOh2|+0.25eV<|LUMOt2|, and |LUMOp2|+0.25eV<|LUMOt2|, wherein HOMOt2 denotes the HOMO energy level of electron trap material in the 2nd organic layer, HOMOh2 denotes the HOMO energy level of the 2nd host material, HOMOp2 denotes the HOMO energy level in the 2nd hole transport phosphorescent materials, LUMOh2 denotes the LUMO energy level in the 2nd host material, LUMOt2 denotes the LUMO energy level in the electron trap material in the 2nd organic layer, and LUMOp2 denotes the LUMO energy level in the 2nd hole transport phosphorescent material. The total average thickness of the 1st and 2nd organic

layers is ≥ 40 nm. The 3rd organic layer contains a hole block material having a triple term excitation level which is higher that in the 2nd hole transport phosphorescent material by 0.1 eV. The arrangement gives organic electroluminescent components simultaneous fulfillment of excellent durability, luminescent efficiency, and current-caused chromaticity deterioration prevention at decreased radiation position deviation.

IT 881887-26-9 1229620-10-3

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(electron trap layer; organic electroluminescence components)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1229620-10-3 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

DOCUMENT NUMBER: 154:110158 Phosphorescent platinum complexes, their monomers and TITLE: copolymers, and uses in organic electronic devices INVENTOR(S): Feng, Ke; Zhang, Yadong; Barlow, Stephen; Kim, Dongwook; Marder, Seth R.; Bredas, Jean-Luc; Weck, Marcus; Kippelen, Bernard; Kim, Sung-Jin PATENT ASSIGNEE(S): Georgia Tech Research Corporation, USA; Solvay SA PCT Int. Appl., 78pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. PATENT NO. KIND DATE DATE _____ ____ WO 2011000873 20110106 WO 2010-EP59289 20100630 A1 W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR,

NE, SN, TD, TG, BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM US 2009-222275P PRIORITY APPLN. INFO.: P 20090701

The inventions disclosed and described herein relate to phosphorescent platinum complexes that can be optionally substituted and/or optionally bonded to polymerizable groups, including styrene, acrylate, or norbornene groups, the phosphorescent polynorbornene copolymers made therefrom, and electronic devices comprising the platinum complexes and their copolymers, including organic light emitting diodes. Methods of making the Platinum complexes and the related copolymers and/or devices are also described.

ΙT 1187677-42-4P 1187677-47-9P 1187677-48-0P 1187677-51-5P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(phosphorescent platinum complexes, their monomers and copolymers, and uses in organic electronic devices)

SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,

1187677-42-4 CAPLUS RN

Platinum, [(1-methoxyethylidene)bis[(2,6-pyridinediyl- κ N)(4,6-CN difluoro-1,2-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1187677-47-9 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-methoxyhexylidene)bis[(2,6-pyridinediyl- κ N)(4,6-difluoro-1,2-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1187677-48-0 CAPLUS

CN Platinum, [(1-fluoroethylidene)bis[(2,6-pyridinediyl- κ N)(4,6-difluoro-1,2-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1187677-51-5 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-fluorohexylidene)bis[(2,6-pyridinediyl- κ N)(4,6-difluoro-1,2-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

IT 1187677-52-6P 1187677-53-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(phosphorescent platinum complexes, their monomers and copolymers, and uses in organic electronic devices)

RN 1187677-52-6 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-methoxyhexylidene)bis[(2,6-pyridinediyl-κN)(4,6-difluoro-1,2-phenylene-κC)]]-, (SP-4-2)-, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 3,5-di-9H-carbazol-9-ylbenzoate (CA INDEX NAME)

CM 1

CRN 1187677-47-9 CMF C36 H32 F4 N2 O Pt CCI CCS

CM 2

CRN 1167996-20-4 CMF C39 H30 N2 O2

RN 1187677-53-7 CAPLUS

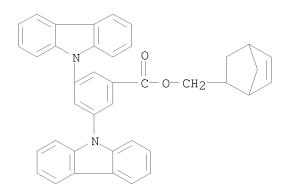
CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-fluorohexylidene)bis[(2,6-pyridinediyl- κ N)(4,6-difluoro-1,2-phenylene- κ C)]]-, (SP-4-2)-, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 3,5-di-9H-carbazol-9-ylbenzoate (CA INDEX NAME)

CM 1

CRN 1187677-51-5 CMF C35 H29 F5 N2 Pt CCI CCS

CM 2

CRN 1167996-20-4 CMF C39 H30 N2 O2



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1631988 CAPLUS

DOCUMENT NUMBER: 154:121124

TITLE: Organic electroluminescent devices using lenses to

control the optical path of emitted light achieving high light-extraction efficiency and reduced image

bleeding and design method of OLED

INVENTOR(S): Sonoda, Shinichiro; Takabashi, Toshiro; Tobise, Manabu

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 31pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

ΙT

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
	US 20100327304	A1	20101230	US 2010-826106		20100629
	JP 2011029172	A	20110210	JP 2010-147753		20100629
[0]	RITY APPLN. INFO.:			JP 2009-156351	Α	20090630

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

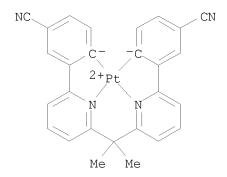
AB Organic electroluminescent devices with high light-extraction efficiency and reduced image bleeding are described which comprise an organic electroluminescent display part which includes an anode, a cathode and at least a light-emitting layer disposed between them, and a lens which controls an optical path of light emitted from the light-emitting layer, where the organic electroluminescent device has a ratio of A to B (A/B) of greater than 1, where A denotes a light-extraction efficiency in terms of front brightness when the lens is placed on a surface from which the light is extracted, and B denotes a light-extraction efficiency in terms of front brightness

when the lens is not placed on the surface from which the light is extracted, and where the organic electroluminescent device has a ratio of φ to a (φ/a) of 1.0 or greater, where a denotes the maximum length of a side of the light-emitting layer and φ denotes an effective diameter of the lens. 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)
(in mixed light-emitting layer; organic electroluminescent devices using lenses to control optical path of emitted light achieving high light-extraction efficiency and reduced image bleeding and design method of OLED)

RN 881887-26-9 CAPLUS

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-CN phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



ANSWER 8 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1556265 CAPLUS

DOCUMENT NUMBER: 154:52794

TITLE: Production method of organic electroluminescent device

INVENTOR(S): Masui, Kensuke; Sugiyama, Takao; Kawato, Koji

DATE

(production method of organic electroluminescent device)

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

KIND

SOURCE: Jpn. Tokkyo Koho, 32pp.

CODEN: JTXXFF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

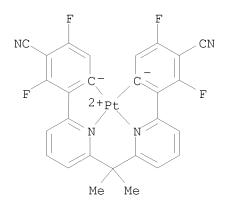
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	JР	4598	137			В1		2010	1215	1	JP 2	009-	1802	04		2	0090	731	
	JΡ	2011	0351	72		Α		2011	0217										
	WO	2011	0136	28		A1		2011	0203	,	WO 2	010-	JP62.	541		2	0100	726	
		W:	ΑE,	AG,	AL,	AM,	AO,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	
			CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	
			ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	
			KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	
			ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PE,	PG,	
			PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,	
			TH,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	
		RW:	AL,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	
			HU,	ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	
			SI,	SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	
			ΝE,	SN,	TD,	ΤG,	BW,	GH,	GM,	ΚE,	LR,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	
			TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM				
PRIO	RIT:	Y APP	LN.	INFO	.:						JP 2	009-	1802	04	Ž	A 2	0090	731	
AB	Th€	e inv	enti	on r	efer	s to	a p	rodu	ctio:	n me	thod	of	an o	rgan:	ic el	lect:	rolu	mines	cent
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	lur	mines	cent	lay	er a	nd ti	he h	ost 1	mate:	rial	in	crys	tal :	form	is	≤ 2			
	cm-	-1,.																	
ΙT	125	56953	-03-	3															
	RL:	: TEM	(Te	chni	cal	or e	ngin	eere	d ma	teri	al u	se);	USE	S (U	ses)				

APPLICATION NO.

DATE

RN 1256953-03-3 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-3,5-difluoro-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 9 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1531317 CAPLUS

DOCUMENT NUMBER: 154:38504

TITLE: Organic electroluminescent devices provided with

polycarbazole compound charge blocking layer

INVENTOR(S): Kinoshita, Masaru; Masui, Kensuke

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 75pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATI	PATENT NO.				KIND		DATE								DATE		
WO 2	 2010:	1404	 82		A1	_				 WO 2	010-	JP58	 537				
	W:	ΑE,	AG,	AL,	AM,	ΑO,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ΜE,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	ΝI,	NO,	NΖ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		TH,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW
	RW:	AL,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,
		HU,	ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,
		SI,	SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	ΤG,	BW,	GH,	GM,	KΕ,	LR,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,
		TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	$_{ m TM}$			
JP :	2010	2783	90		Α		2010	1209		JP 2	009-	1321.	23		2	0090	601
PRIORITY	APP:	LN.	INFO	.:						JP 2	009-	1321	23	1	A 2	0090	601
OTHER SOU	URCE	(S):			MAR:	PAT	154:	3850	4								

Ι

AB The title organic electroluminescent device comprises ≥1 organic layer(s) containing a luminescent layer between the anode and the cathode, wherein (1) the luminescent layer contains a host material and a specific iridium phosphorescent material and (2) an organic charge block layer adjacent to the luminescent layer on its cathode side contains polycarbazole compds. [I: R1-8 = H, substituent; A = (substd.) aromatic ring; m≥2 int., n≥1 int.]. the polycarbazole charge block layers I effectively increases luminous efficiency in the electroluminescent devices.

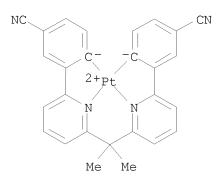
IT 881887-26-9

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(host layer; organic electroluminescent devices provided with)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1496714 CAPLUS

DOCUMENT NUMBER: 154:21511

TITLE: Organic electroluminescence element having

light-emitting layer made of platinum phenylpyridine

derivative

INVENTOR(S): Masui, Kensuke

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 25pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	API	PLICATION NO.		DATE		
						_			
	US 20100301315	A1	20101202	US	2010-780581		20100514		
	JP 2011014873	A	20110120	JΡ	2010-98624		20100422		
PRIOR	RITY APPLN. INFO.:			JΡ	2009-132033	Α	20090601		
				JΡ	2010-98624	Α	20100422		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB An organic electroluminescence element comprising an anode, a cathode, and at least one organic layer disposed between and the anode and the cathode, the organic layer containing a light-emitting layer, where the light-emitting layer contains a host material and a phosphorescent light-emitting material, and the host material contains at least one platinum complex compound containing a tetradentate ligand, expressed by a given general formula, is disclosed.

IT 881887-26-9 1227925-61-2 1256953-03-3

1256953-04-4

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(organic electroluminescence element having anode, cathode, and light-emitting compound)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1227925-61-2 CAPLUS

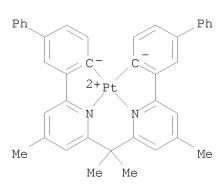
CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)[1,1'-biphenyl]-3,4-diyl- κ C4]]-, (SP-4-2)- (CA INDEX NAME)

RN 1256953-03-3 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-3,5-difluoro-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1256953-04-4 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(4-methyl-6,2-pyridinediyl- κ N)[1,1'-biphenyl]-3,4-diyl- κ C4]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 11 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1226731 CAPLUS

DOCUMENT NUMBER: 153:492710

TITLE: Organic electroluminescent device

INVENTOR(S):
Kinoshita, Ikuo

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 48pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20100244676	A1	20100930	US 2010-751066		20100331
JP 2010245063	A	20101028	JP 2009-88523		20090331
PRIORITY APPLN. INFO.:			JP 2009-88523	A	20090331
ASSIGNMENT HISTORY FOR	US PATEN'	T AVAILABLE	IN LSUS DISPLAY	FORMAT	

OTHER SOURCE(S): MARPAT 153:492710

GΙ

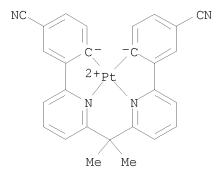
AB An organic electroluminescent is provided and includes: a pair of electrodes; and at least one organic layer, between the pair of electrodes, including a light emitting layer. The device comprising, in the at least one organic layer, a compound I [Q = t-Bu or trimethylsilyl group; R = H, alkyl, cyano, aryl, or heteroaryl; n = 1 or 2].

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 12 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1211881 CAPLUS

DOCUMENT NUMBER: 153:494508

INVENTOR(S):

Organic electroluminescence devices provided with TITLE:

> organometallic heterocyclic complex compounds Takizawa, Hiroo; Takada, Saki; Fukuzaki, Eiji

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Tokkyo Koho, 144pp.

CODEN: JTXXFF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 4551480	B1	20100929	JP 2009-201150	20090831
PRIORITY APPLN. INFO.:			JP 2009-201150	20090831
OTHER SOURCE(S):	MARPAT	153:494508		

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The electroluminescent layer contained in organic layers bound between AB electrodes in the title organic electroluminescence device has a group I [R1 = alkyl; R2, R3 = H, alkyl; ns =1-3 int.; Z = C5-8 saturated ring] substd. in metal complex compds. II [M21 = Ir; A21-23 = N, C; Z21 = (substd.) quinolyl, (substd.) isoquinolyl, (substd.) benzooxazolyl, (substd.) pyridyl, (substd.) imidazolyl, (substd.) pyrazolyl; Z22 =(substd.) Ph, (substd.) pyrazolyl, (substd.) pyridyl, (substd.) benzooxazolyl, (substd.) thiophenyl; L22,23 = C, N, O; L22,23-E21 = divalent ligand including phenylpyridyl, pyridylpyridine, picolinic acid, acetylacetone; k = 1-3int., 1 = 0-2 int., k+1=3; S21,22 = group I; n,m = 0-4 int. where (n+m)=1-4int.], III [A141-146 = N, C; Z141,142 = isoquinolyl, benzooxazolyl,pyridyl, imidazolyl, pyrazolyl; Z143,144 = (substd.) isoquinolyl, (substd.) benzooxazolyl, (substd.) Ph, (substd.) pyridyl, (substd.) imidazolyl, (substd.) pyrazolyl; E141 = -C(R1)(R2) - divalent group; R1,2 =alkyl; S141,144 = group I; n,m,k,l = 0-2 int., (n+m+k+1)=1-2 int.], or IV [R1a-11 = H, alkyl, cycloalkyl, aryl, 2,6-dimethylphenyl, 2,4,6-trimethylphenyl, cyano, fluoro; at least 1 of Rla-11 has group I; X-Y = monoanionic divalent ligand chosen from diketones and picolic acid derivs.; n =1-3 int.]. Group I provides the organic electroluminescent devices with phosphorescent materials in high electroluminescent conversion efficiency, high durability, and low chromaticity deviation in characteristic deterioration.

1246565-49-0P 1246565-50-3P ΙT

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (organic electroluminescent layer; organic electroluminescence devices provided with organometallic heterocyclic complex compds.)

RN 1246565-49-0 CAPLUS

Platinum, [[2-(1-methylcyclopentyl)-1-[(1-CN methylcyclopentyl)methyl]ethylidene]bis[6,2-pyridinediyl(4-cyano-2,1phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1246565-50-3 CAPLUS

CN Platinum, [(1-methylethylidene)bis[[4-[(1-methylcyclopentyl)methyl]-6,2-pyridinediyl](4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 13 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:1065584 CAPLUS

DOCUMENT NUMBER: 153:370485

TITLE: Electroluminescent phosphorescent organic transition

metal complexes, light-emitting layers containing them, organic electroluminescent devices using them, and displays and lighting systems using the devices

INVENTOR(S):
Fukuzaki, Eiji

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 117pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

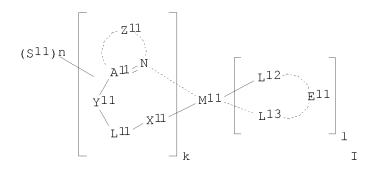
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2010185068 JP 4564590	A B1	20100826 20101020	JP 2009-223455 JP 2010-76447	20090928 20100329

PRIORITY APPLN. INFO.:

JP 2009-201144 A 20090831 JP 2009-223455 A 20090928

OTHER SOURCE(S): MARPAT 153:370485

GΙ



AB The title complexes are represented by I [M11 = Group VIII metal, Group IB metal, preferably Ir, Pt; All = N, C; Xll = O, S, (substituted) N, single bond; Y 11 = linkage, single bond; Zll = N-containing atom. group; Ll2, Ll3 = C N, O, P; Ell = atomic group forming bidentate ligand with Ll2 and Ll3; Sl1 = CH2CMe3, other branched alkyl groups (structures given), 1-adamantyl, 2-adamantyl = group substituting Ll1 and/or Zl1; k = 1-3; l = 0-2; k + l = 2, 3; n = 1-4]. The title organic electroluminescent devices may also contain carbazoles or indoles in the light-emitting layers. The title devices show high luminescence efficiency, good durability, and suppressed color shift after brightness decrease.

IT 1241050-83-8P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (manufacture of electroluminescent phosphorescent organic transition metal complexes for emitter layers of organic electroluminescent devices for displays and lighting systems)

RN 1241050-83-8 CAPLUS

CN Platinum, [(1-methylethylidene)bis[[4-(1-methylpropyl)-6,2-pyridinediyl- κ N](5-cyano-1,2-phenylene- κ C2)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 14 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:993023 CAPLUS

DOCUMENT NUMBER: 153:272832

TITLE: Coating composition for organic electroluminescent

device and production method of vapor deposition film

INVENTOR(S): Sato, Yu

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Tokkyo Koho, 38pp.

CODEN: JTXXFF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	INT NO.	KIND	DATE	API	PLICATION NO.	DATE		
						_		
JP 4	1523666	В1	20100811	JP	2009-180166		20090731	
JP 2	2011034812	A	20110217					
KR 2	2011013263	A	20110209	KR	2010-72371		20100727	
PRIORITY	APPLN. INFO.:			JP	2009-180166	Α	20090731	

AB The invention refers to a coating composition for an organic electroluminescent device comprising an organic compound having mol. weight < 2000, and a medium which dissolves and disperses the organic compound and does not vaporize at the evaporation temperature of the organic compound, wherein the medium is an organic salt or a

polymethacrylate with average mol. weight > 10000, and remains a liquid under $< 1\ \mathrm{x}$

10-2 Pa pressure at the evaporation temperature of the organic compound, and has a

decomposition temperature > 30 $^{\rm o}$ higher than the decomposition temperature of the organic

compound

IT 881887-26-9

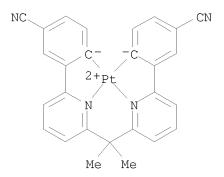
RL: TEM (Technical or engineered material use); USES (Uses)

(coating composition for organic electroluminescent device and production method of

vapor deposition film)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 15 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:881133 CAPLUS

DOCUMENT NUMBER: 153:188521

TITLE: Organic electroluminescent device

INVENTOR(S):
Tobiyo, Manabu

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 35pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2010157606	A	20100715	JP 2008-334928	20081226
PRIORITY APPLN. INFO.:			JP 2008-334928	20081226

AB The device is characterized by a light-emitting layer containing electron-transporting phosphors (E) and hole-transporting host materials between a pair of electrodes, wherein the concentration of E in the layer is gradually decreased toward the anode side from the cathode side, and ≥1 phosphor having triplet energy level lower than that of E is contained in the E concentration-decreased region in 1/100-1/2-fold thickness

of
total light-emitting layer thickness. Preferably, E is Pt-centered metal
complex. The organic EL device with high-brightness white light emission is
provided.

IT 808111-97-9 864541-08-2 881887-26-9
RL: TEM (Technical or engineered material use); USES (Uses)
(phosphor with low triplet energy level; organic electroluminescent device having phosphor having controlled triplet energy level in low distribution region of electron-transporting phosphor)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 16 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:851994 CAPLUS

DOCUMENT NUMBER: 153:188483

TITLE: Organic electroluminescent devices employing platinum

complexes

INVENTOR(S): Takada, Saki; Yagi, Kazunari; Murakami, Takeshi;

Fukuzaki, Eiji

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 85pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

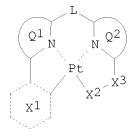
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20100171111 PRIORITY APPLN. INFO.:	A1	20100708	US 2010-683178 JP 2009-2056 JP 2009-186893 JP 2009-201156	A	20100106 20090107 20090811 20090831

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 153:188483

GΙ



Ι

AB Organic electroluminescent devices comprising a pair of electrodes and a light emitting layer between the electrodes are described in which the device has a layer containing a compound are described by the general formula I (L = a divalent linking group; Q1 and Q2 = independently selected aromatic or aliphatic heterocycle coordinated to Pt through a nitrogen atom; X1 = a 6-membered ring containing ≥ 1 N atoms; Q1, Q2, and X1 independently may have substituents; X2 = S, P, O, or N; and X3 = C, S, or P). Selected complexes are also described, as is light-emitting apparatus, including illumination devices, employing the electroluminescent devices.

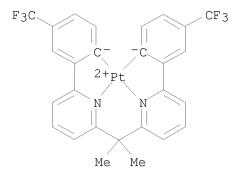
IT 881887-28-1

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent devices employing platinum complexes)

RN 881887-28-1 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]- (9CI) (CA INDEX NAME)



L8 ANSWER 17 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:850823 CAPLUS

DOCUMENT NUMBER: 153:188475

TITLE: Organic electroluminescent devices employing

arylene-bridged carbazole derivatives

INVENTOR(S): Kinoshita, Ikuo; Takeda, Akira; Ise, Toshihiro;

Takizawa, Hiroo; Inoue, Masaaki; Kato, Takashi

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 149pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 20100171418	A1	20100708	US 2010-683098	20100106		
PRIORITY APPLN. INFO.:			JP 2009-1162 A	20090106		
			JP 2009-201149 A	20090831		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 153:188475; MARPAT 153:188475 GI

Organic electroluminescent devices comprising a pair of electrodes and an organic layer including a light-emitting layer between the electrodes are described in which the organic layers comprises compds. described by the general formula I (R1-3 = independently selected C1-6 alkyl; R4 = H or -Q'(R6)(R7)R8; R5 = H, (un)substituted alkyl, cyano, (un)substituted aryl group, or (un)substituted heteroaryl; R6-8 = independently selected C1-6 alkyl; Q, Q' = independently selected C or Si; and n = 1 or 2). The light-emitting layer may addnl. comprise ≥ 1 metal (especially Pt) complex and/or an adamantane derivative

IT 808111-97-9 881887-26-9 881887-28-1 881887-29-2 1227925-61-2 1234267-56-1

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent devices employing arylene-bridged carbazole derivs.)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-28-1 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]-(9CI) (CA INDEX NAME)

RN 881887-29-2 CAPLUS

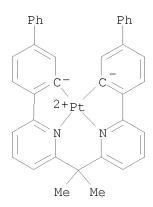
CN Platinum, [[2,2'-(1-methylethylidene)bis[6-(3-fluorophenyl)pyridinato]](2-)]- (9CI) (CA INDEX NAME)

RN 1227925-61-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)[1,1'-biphenyl]-3,4-diyl- κ C4]]-, (SP-4-2)- (CA INDEX NAME)

RN 1234267-56-1 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)[1,1'-biphenyl]-4,3-diyl- κ C3]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 18 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:785427 CAPLUS

DOCUMENT NUMBER: 153:130181

TITLE: Organic electroluminescent device

INVENTOR(S):
Kitamura, Tetsu

PATENT ASSIGNEE(S): Fujifilm Corp., Japan

SOURCE: U.S. Pat. Appl. Publ., 56pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20100155712	A1	20100624	US 2009-644303	20091222
JP 2010147441	А	20100701	JP 2008-326513	20081222
PRIORITY APPLN. INFO.:			JP 2008-326513 A	20081222
ASSIGNMENT HISTORY FOR	US PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	
OTHER SOURCE(S):	MARPAT	153:130181		
GI				

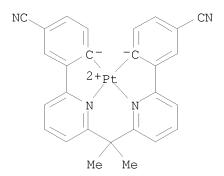
AB An organic electroluminescent device is provided and includes: a cathode; an anode; and a light-emitting layer between the cathode and the anode. The light-emitting layer includes a compound I [L = linking group; A1-10 = C or N, provided that at least two of A1, A5, A6, and A10 = C atom having substituent R'; R' = substituent having a C atom at a bonding position thereof; a plurality of Rs each independently represent a substituent; m = integer, n = integer 2 - 10].

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 19 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:751949 CAPLUS

DOCUMENT NUMBER: 153:103869

TITLE: Organic white electroluminescent devices

INVENTOR(S): Shibata, Kazuyuki

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 51pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2010135689 A 20100617 JP 2008-312406 20081208 PRIORITY APPLN. INFO.: JP 2008-312406 20081208

OTHER SOURCE(S): MARPAT 153:103869

AB A luminescent layer bound between a pair of electrodes in the title organic white electroluminescent device comprises an aggregate luminescent material, a monomer luminescent material, and a host luminescent material, wherein the luminescent peak wavelength for the aggregate luminescent material is longer than that for the monomer luminescent material. The host luminescent materials may be indole derivs. (Q)n-L101 [Q = R101-R106 substituted 1H-indole, R101-105 = H, substituent; R106 = secondary or tertiary alkyl, R101 and R106 may be bonded together to form a ring; L101 = combination group; n101 ≥2 int.]. The arranged materials give the organic white electroluminescent devices excellent operational durability.

IT 808111-97-9 864541-08-2 916427-56-0 1229620-00-1 1229620-02-3 1229620-06-7 1229620-10-3 1229620-11-4 1229620-13-6

RL: PRPH (Prophetic); PRP (Properties)
(electron transport phosphorescent material; organic white
electroluminescent devices provided with host luminescent indole derivative
materials)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

RN 916427-56-0 CAPLUS

CN Platinum, [(diphenylmethylene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C1]]-, (SP-4-2)- (CA INDEX NAME)

RN 1229620-00-1 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

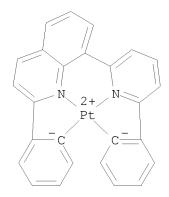
RN 1229620-02-3 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

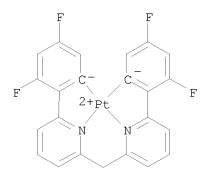
RN 1229620-06-7 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

RN 1229620-09-0 CAPLUS CN INDEX NAME NOT YET ASSIGNED



RN 1229620-10-3 CAPLUS CN INDEX NAME NOT YET ASSIGNED



RN 1229620-11-4 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1229620-13-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

IT 881887-26-9

RL: PRPH (Prophetic); PRP (Properties)

(green phosphorescent material; organic white electroluminescent devices provided with host luminescent indole derivative materials)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

L8

ACCESSION NUMBER: 2010:746879 CAPLUS

DOCUMENT NUMBER: 153:73062

TITLE: Organic electroluminescent element INVENTOR(S): Shibata, Kazuyuki; Satou, Tasuku

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 132pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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WO 2	0100	6770	08		A1	_	2010	0617	1	WO 2	009-	JP69	 878		2	0091	125
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		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ΜE,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
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		ΙE,	IS,	ΙΤ,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	ΤG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,
		ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM					
JP 2	0101	6106	6 O		Α		2010	0722		JP 2	009-	2628	75		2	0091	118
PRIORITY A	APPL	Ν.	INFO	.:						JP 2	008-	3123	25	i	A 2	0081	208

AB Disclosed is an organic electroluminescent element that has on a substrate a pair of electrodes and at least one organic layer formed between the electrodes. The organic layer has at least two light-emitting layers and an intermediate layer formed between the light-emitting layers, of which there are at least two. Each of the light-emitting layers, of which there are at least two, contains a phosphorescent material. The phosphorescent material is at least one kind selected from a group comprising blue phosphorescent material having an emission peak of 420 nm to <500 nm, green phosphorescent material having an emission peak of 500 nm to <570 nm, and red phosphorescent material having an emission peak of 570 nm to <650 nm. The phosphorescent materials contained in each of the light-emitting layers have mutually different emission peaks, and the intermediate layer contains a binder material.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent element)

RN 881887-26-9 CAPLUS

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:721861 CAPLUS

DOCUMENT NUMBER: 153:73017

TITLE: Organic electroluminescence device and luminescence

apparatus

INVENTOR(S): Shibata, Kazuyuki; Kinoshita, Masaru

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 29pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
				-	
US 20100140606	A1	20100610	US 2009-634670		20091209
JP 2010161357	A	20100722	JP 2009-279603		20091209
PRIORITY APPLN. INFO.:			JP 2008-314813	Α	20081210

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

The invention provides an organic EL device including a pair of electrodes and at least one luminescent layer located between the pair of electrodes, the luminescent layer including a blue phosphorescent material having a luminescence peak in a range of from 420 nm to <500 nm, a green phosphorescent material having a luminescence peak in a range of from 500 nm to <570 nm, a red phosphorescent material having a luminescence peak in a range of from 570 nm to 650 nm, and a charge-transporting material, the charge-transporting material having a lowest excited triplet energy level (T1) of \geq 2.7 eV, and the T 1 of the charge-transporting material being higher than the T 1 of the blue phosphorescent material by \geq 0.08 eV.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescence device and luminescence apparatus)

RN 881887-26-9 CAPLUS

L8 ANSWER 22 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:721857 CAPLUS

DOCUMENT NUMBER: 153:73016

TITLE: Organic electroluminescence device and luminescence

apparatus

INVENTOR(S): Shibata, Kazuyuki; Kinoshita, Masaru; Satou, Tasuku

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 66pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20100140605	A1	20100610	US 2009-632825	20091208
JP 2010161356	A	20100722	JP 2009-279602	20091209
PRIORITY APPLN. INFO.:			JP 2008-314812	A 20081210

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention provides an organic EL device including a pair of electrodes and at least one luminescent layer between the pair of electrodes, the at least one luminescent layer including at least two phosphorescent materials, an elec. inert material, and a charge-transporting material, the at least two phosphorescent materials being selected from a blue phosphorescent material having a luminescence peak in a range of from 420 nm to <500 nm, a green phosphorescent material having a luminescence peak in a range of from 500 nm to <570 nm, or a red phosphorescent material having a luminescence peak in a range of from 570 nm to 650 nm. The invention also provides a luminescence apparatus including the above organic EL device.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescence device and luminescence apparatus)

RN 881887-26-9 CAPLUS

L8 ANSWER 23 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:721850 CAPLUS

DOCUMENT NUMBER: 153:73015

TITLE: Organic electroluminescence device

INVENTOR(S):
Sotoyama, Wataru

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 80pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20100140602	A1	20100610	US 2009-628241	20091201
JP 2010140950	A	20100624	JP 2008-313239	20081209
PRIORITY APPLN. INFO.:			JP 2008-313239 A	20081209

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB There is provided an organic electroluminescence device comprising a pair of electrodes on a substrate and at least one organic layer containing a luminescence layer between the electrodes, the luminescence layer comprising at least 3 luminescence materials different in luminescent color, and the at least 3 luminescence materials being Pt complexes.

IT 808111-97-9 881887-26-9

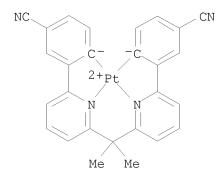
RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescence device)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-CN phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



ANSWER 24 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

2010:720672 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 153:49004

TITLE: Organic field light emitting device

INVENTOR(S): Kinoshita, Masaru

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 43pp.; Chemical Indexing

Equivalent to 153:24314 (WO)

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.											ION 1			D.	ATE	
	JP 201 WO 201									JP 2	008-	3004	67				
	W:	CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	BG, DM,	DO,	DZ,	EC,	EE,	EG,
		KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	HU, LS,	LT,	LU,	LY,	MA,	MD,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	NI, SK, VC,	SL,	SM,	ST,	SV,	
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	_	emitt	ing	laye	r, a	nd a	cat	hode	whi	ch a	re a	rran	ged :	in t	his	orde:	r. The
	light emitting layer has a 1st light emitting layer, a 2nd light emitting layer, and a 3rd light emitting layer which are arranged in this order when viewed from the anode side. The 1st light emitting layer and the 3rd									der							
	light emitting layer						ight	of ·	the	the same color. The Zent from the color of				2nd			

from the 1st light emitting layer and the 3rd light emitting layer. At

least 1 of the 1st, the 2nd, and the 3rd light emitting layer contains a phosphorescent light emitting material which emits light having a peak wavelength in the range from 500 nm to 570 nm and a phosphorescent light emitting material which emits light having a peak wavelength of 570 nm or above.

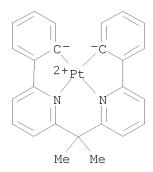
IT 808111-97-9 881887-26-9

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic field light emitting element)

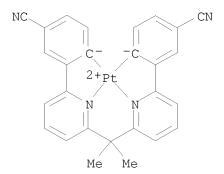
RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 25 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:688806 CAPLUS

DOCUMENT NUMBER: 153:24335

TITLE: Organic electroluminescent device

INVENTOR(S): Satou, Tasuku; Kinoshita, Masaru; Tobise, Manabu

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 30pp.; Chemical Indexing

Equivalent to 152:603691 (WO)

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.				KIN	D	DATE		APPLICATION NO.									
		2010 2010						2010	0603		JP 2	008-	2953.	32				
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			ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
			KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
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			PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
			ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	
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			ΙE,	IS,	ΙT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
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			SN,	TD,	ΤG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,
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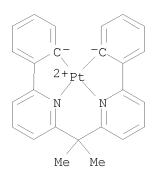
ΙT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

808111-97-9 CAPLUS RN

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-CN phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

transport material and an organic electron acceptor.



ANSWER 26 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

2010:683332 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 153:24325

TITLE: Organic electroluminescent element and method for

> manufacturing it Hayashi, Shigeyuki

INVENTOR(S): PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 33pp.; Chemical Indexing

Equivalent to 152:603689 (WO)

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND				D	DATE APPLICATION NO.								DATE				
JP 2	2010	1235	 12		A 20100603					JP 2008-298348						0081	121
WO 2	2010	0586	90		A1	A1 20100527			,	WO 2	009-		20091029				
	W:	ΑE,	AG,	AL,	AM,	ΑΟ,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
		ΙE,	IS,	ΙΤ,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,
		SN,	TD,	ΤG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,
		ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM					
DTTV	7 DD	T NT	TNEO							TD 2	000	2002	10		7 2	0001	1 2 1

PRIORITY APPLN. INFO.: JP 2008-298348 A 20081121 AB The invention relates to a method for manufacturing an organic

element which comprises, between a pair of electrodes, at least one organic layer including a light-emitting layer to achieve high luminance efficiency, lower driving voltage and long-lasting. At least one organic layer contains at least one kind of alkali metal, alkaline earth metal or salt of the metals. During or after film formation of the organic layer containing

least one kind of alkali metal, alkaline earth metal or salt of the metals, the method includes a heat treatment step wherein a heat treatment is carried out at a temperature not less than 50° but not more than the m.p. of the organic layer containing at least one kind of alkali metal, alkaline earth

metal or salt of the metals, or alternatively a current application step wherein a current is applied.

IT 881887-26-9

at.

RN

electroluminescent

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (organic electroluminescent element and method for manufacturing it) 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 27 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:680137 CAPLUS

DOCUMENT NUMBER: 153:24314

TITLE: Organic field light emitting device

CN

INVENTOR(S):
Kinoshita, Masaru

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 71pp.; Chemical Indexing Equivalent to

153:49004 (JP) CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

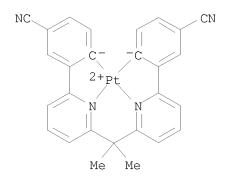
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				WO 2009-JP69700	
	W: AE, AG, AL,	AM, AO	, AT, AU, A	AZ, BA, BB, BG, BH, E	BR, BW, BY, BZ,
				CZ, DE, DK, DM, DO, D	
	ES, FI, GB,	GD, GE	, GH, GM, G	GT, HN, HR, HU, ID, I	IL, IN, IS, KE,
	KG, KM, KN,	KP, KR	, KZ, LA, L	LC, LK, LR, LS, LT, I	LU, LY, MA, MD,
				MZ, NA, NG, NI, NO, N	
	PH, PL, PT,	RO, RS	, RU, SC, S	SD, SE, SG, SK, SL, S	SM, ST, SV, SY,
				JG, US, UZ, VC, VN, Z	
				OK, EE, ES, FI, FR, G	
				MK, MT, NL, NO, PL, E	
				CI, CM, GA, GN, GQ, G	
				LS, MW, MZ, NA, SD, S	SL, SZ, TZ, UG,
				MD, RU, TJ, TM	
				JP 2008-300467	
PRIO:	RITY APPLN. INFO.:			JP 2008-300467	
AB				mitting device having	
				degree of color misal	
				includes on a substra	
				which are arranged in	
				emitting layer, a 2r	
				which are arranged	
				e 1st light emitting	
				ne same color. The 2	
				nt from the color of	
				d the 3rd light emitt	
				3rd light emitting l	
				al which emits light	
				to 570 nm and a phosp	
	=	nich em	its light h	naving a peak waveler	igen of 570 nm or
TT	above. 808111-97-9 881	007 26	0		
ΙT				rem (Toobaical on an	rincored material
	use); USES (Uses)	ı addıt	ive use); 1	TEM (Technical or eng	gineered material
	(organic field 1	iaht om	itting olom	non+)	
RN	808111-97-9 CAPLUS	_	TCCIIIG EIEII	merre,	
L/I/I	OUOIII-9/-9 CAPLUS				

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-

phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 28 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:656929 CAPLUS

DOCUMENT NUMBER: 152:603691

TITLE: Organic electroluminescent device

INVENTOR(S): Satou, Tasuku; Kinoshita, Masaru; Tobise, Manabu

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 52pp.; Chemical Indexing Equivalent to

153:24335 (JP) CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2010058716	A1	20100527	WO 2009-JP69133	20091110
W: AE, AG,	AL, AM, AC), AT, AU, 1	AZ, BA, BB, BG, BH,	BR, BW, BY, BZ,
CA, CH,	CL, CN, CC	CR, CU,	CZ, DE, DK, DM, DO,	DZ, EC, EE, EG,
ES, FI,	GB, GD, GE	G, GH, GM,	GT, HN, HR, HU, ID,	IL, IN, IS, KE,
KG, KM,	KN, KP, KR	k, KZ, LA, 1	LC, LK, LR, LS, LT,	LU, LY, MA, MD,
ME, MG,	MK, MN, MW	, MX, MY, I	MZ, NA, NG, NI, NO,	NZ, OM, PE, PG,
PH, PL,	PT, RO, RS	, RU, SC,	SD, SE, SG, SK, SL,	SM, ST, SV, SY,
TJ, TM,	TN, TR, TT	TZ, UA,	UG, US, UZ, VC, VN,	ZA, ZM, ZW
RW: AT, BE,	BG, CH, CY	, CZ, DE,	DK, EE, ES, FI, FR,	GB, GR, HR, HU,

IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,

ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

JP 2010123716 A 20100603 JP 2008-295332 20081119
PRIORITY APPLN. INFO.: JP 2008-295332 A 20081119

AB Disclosed is an organic electrolyminoscent device with which high

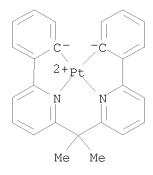
B Disclosed is an organic electroluminescent device with which high light-emission efficiency can be obtained with a low drive voltage. The organic electroluminescent device comprises, in order from the substrate side, a 1st electrode, a 1st hole injection layer, a 2nd hole injection layer, a light-emitting layer, and a 2nd electrode, on the substrate, with the 1st hole injection layer being in contact with the 1st electrode and containing a metal oxide, and the 2nd hole injection layer containing a hole transport material and an organic electron acceptor.

IT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 29 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:656764 CAPLUS

DOCUMENT NUMBER: 152:603689

TITLE: Organic electroluminescent element and method for

manufacturing it Hayashi, Masayuki

INVENTOR(S): Hayashi, Masayuki
PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 64pp.; Chemical Indexing Equivalent to

153:24325 (JP) CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2010058690	A1 201005	527 WO 2009-JP68605	20091029
W: AE, AG, AL,	AM, AO, AT, A	AU, AZ, BA, BB, BG, BH,	BR, BW, BY, BZ,
CA, CH, CL,	CN, CO, CR, C	CU, CZ, DE, DK, DM, DO,	DZ, EC, EE, EG,
ES, FI, GB,	GD, GE, GH, G	GM, GT, HN, HR, HU, ID,	IL, IN, IS, KE,
KG, KM, KN,	KP, KR, KZ, I	LA, LC, LK, LR, LS, LT,	LU, LY, MA, MD,

ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY,

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

JP 2010123512 A 20100603 JP 2008-298348 20081121 PRIORITY APPLN. INFO.: JP 2008-298348 A 20081121

AB The invention relates to a method for manufacturing an organic electroluminescent

element which comprises, between a pair of electrodes, at least one organic layer including a light-emitting layer to achieve high luminance efficiency, lower driving voltage and long-lasting. At least one organic layer contains at least one kind of alkali metal, alkaline earth metal or salt of the metals. During or after film formation of the organic layer containing

least one kind of alkali metal, alkaline earth metal or salt of the metals, the method includes a heat treatment step wherein a heat treatment is carried out at a temperature not less than 50°C but not more than the m.p. of the organic layer containing at least one kind of alkali metal, alkaline

earth metal or salt of the metals, or alternatively a current application step wherein a current is applied.

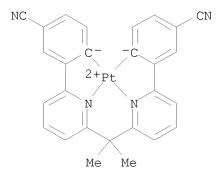
IT 881887-26-9

at

RN

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (organic electroluminescent element and method for manufacturing it) 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:651989 CAPLUS

DOCUMENT NUMBER: 153:24285

TITLE: Organic electroluminescent element INVENTOR(S): Shibata, Kazuyuki; Sotoyama, Wataru

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 76pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.				KIND DATE			APPLICATION NO.						DATE			
WC	2010	0587	 87		A1		2010	0527		WO 2	009-	-JP69543			20091118		118
	W:	ΑE,	AG,	AL,	ΑM,	ΑO,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
		ES,	FΙ,	GB,	GD,	GΕ,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,
		KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PE,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,	HU,
		ΙE,	IS,	ΙΤ,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	ΤG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,
		ZM,	ZW,	AM,	AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM					
JP	2010	1538	20		A		2010	0708		JP 2	009-	2618	91		2	0091	117
PRIORIT	RIORITY APPLN. INFO.:			.:						JP 2	-800	2982	12		A 2	0081	121
OTHER S	THER SOURCE(S):				MARPAT 153:24285				5								
GI																	

AB Disclosed is an organic electroluminescent element for which an organic compound

layer that contains at least a light-emitting layer, a 1st electron transport layer provided in contact with the cathode-side interface of the aforementioned light-emitting layer, and a 2nd electron transport layer provided in contact with the cathode-side interface of the aforementioned 1st electron transport layer, is sandwiched between a pair of electrodes; the aforementioned light-emitting layer contains at least a light-emitting material I [AC15, AC16 = C-R or N; R = H or substituent; LC1 = single bond or divalent linking group] and a hole transportable host material; and the aforementioned 2nd electron transport layer contains an electron-transportable material phenanthrene option substituted with (R1)n group [R1 = H or C1-10 alkyl(un) substituted C630 aryl; n = 0 - 8] and at least one type selected from a group comprised of an alkali metal, an alkali metal salt, an alkali earth metal, and an alkali earth metal salt. 881887-28-1 1227925-61-2 881887-26-9

Ι

RN 881887-26-9 CAPLUS

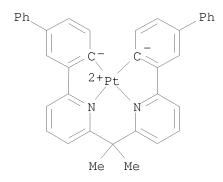
CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-28-1 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]-(9CI) (CA INDEX NAME)

RN 1227925-61-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)[1,1'-biphenyl]-3,4-diyl- κ C4]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 31 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:629008 CAPLUS

DOCUMENT NUMBER: 152:592160

TITLE: Group IVA element arylamido complexes as materials for

organic electroluminescent devices

INVENTOR(S): Stoessel, Philipp; Heil, Holger; Joosten, Dominik;

Pflumm, Christof; Gerhard, Anja

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 77pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

light-emitting layers)

1227140-79-5 CAPLUS

RN CN

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.			APPLICATION NO.	
WO 2010054729 WO 2010054729	 A2 A3	20100520 20100930		20091014
W: AE, AG, AL,			, BA, BB, BG, BH, E	
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			, LC, LK, LR, LS, I	
			, MZ, NA, NG, NI, N	
			, SD, SE, SG, SK, S , UG, US, UZ, VC, V	
			, og, os, oz, ve, v , ee, es, fi, fr, o	
			, MT, NL, NO, PL, E	
			, CM, GA, GN, GQ, G	
			, MW, MZ, NA, SD, S	
ZM, ZW, AM,	AZ, BY,		, RU, TJ, TM, AP, E	
	A1	20100512	DE 2008-1020080566	
PRIORITY APPLN. INFO.:		150 500160	DE 2008-1020080566	588A 20081111
OTHER SOURCE(S):			1D (D1D D1E) V1 D44	O [1 M C:
AB Group IVA element of Ge, Sn, Ti, Zr, Hf,				
1; A, B, D, E = dou				
part of an aromatic				
C1-40 alkyl, alkoxy				
alkyl, cycloalkyl,				
M[R2N-R1A-R1B(R1D-F				
non-porphyrinato or				
exciton-blocking ma				
electroluminescent corresponding depro				
tested as additives				
(3-30%), which subs				
substances, such as				
of 300 mmol of the				
1,1'-biphenyl-2,2-d				
2 L of Et2O followe				
Si[Q(NAr2)]2 (1a, s				
organic light-emitt				
Si[1,2-C6H4(NPh)2]2 light-emitting laye			-brocking layer and	as a dopant to
bis(1,1':3',1'':3''	11113.	'''.1''''-an	inquephenyl-5''-vl)	methanone (M1).
doped with 10% of 1				
efficiency of 54 cd				
1b.		-		
IT 1227140-79-5				
RL: PEP (Physical,				(Technical or
engineered material				
				nosilane diamides as
additives for el		and exciton	-blocking layers, d	iopants for OLED

Platinum, [9H-fluoren-9-ylidenebis[(6,2-pyridinediyl- κ N)-2,1-

phenylene- κ C1]]-, (SP-4-2)- (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

L8 ANSWER 32 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:625476 CAPLUS

DOCUMENT NUMBER: 152:579240

TITLE: Organic electroluminescent elements employing

sequentially formed Al and Ag electrode layers

INVENTOR(S):
Kitamura, Yoshitaka

PATENT ASSIGNEE(S): FujiFilm Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 24pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20100123126	A1	20100520	US 2009-617736		20091113
JP 2010123439	A	20100603	JP 2008-296859		20081120
PRIORITY APPLN. INFO.:			JP 2008-296859	Α	20081120

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

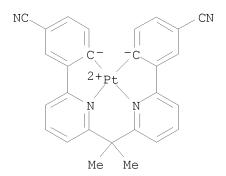
AB Organic electroluminescent elements are described which comprise a first electrode, an organic layer including at least a light emitting layer, and a second electrode, disposed in this order, where the second electrode comprises, starting from the side of the organic layer, an aluminum (Al) layer having a thickness of 0.1 nm to 10 nm and a silver (Ag) layer having a thickness of 3 nm to 50 nm. Preferably, the organic layer includes an electron injection layer doped with an alkali metal, and a layer of an alloy of Al and Li is disposed between the organic layer and the second electrode.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (OLED employing sequentially formed Al and Ag electrode layers)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 33 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:568075 CAPLUS

DOCUMENT NUMBER: 152:537783

TITLE: Organic electroluminescent element

INVENTOR(S): Hayashi, Masayuki

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 111pp.; Chemical Indexing

Equivalent to 152:537678 (WO)

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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JP 2010103306
                                20100506
                                            JP 2008-273308
                         Α
                                                                   20081023
     WO 2010047279
                                20100429
                                           WO 2009-JP67902
                                                                   20091016
                         Α1
            AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
             CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG,
             ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG,
             PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI,
             SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
             ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                            JP 2008-273308
                                                              A 20081023
GΙ
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$$Ar^{1}L^{1}$$
 A^{2}
 A^{2}
 A^{3}
 N
 $L^{2}Ar^{2}$
(R) n

AB Disclosed is an organic electroluminescent element that comprises a luminescent layer containing an electron transport phosphorescent material, a cathode, and an electron transport layer provided between the luminescent layer and the cathode, where in the electron transport layer contains a N-containing heterocyclic compound I [A1-3 = N or C; Ar1 = (un)substituted C6-60

aryl or (un)substituted C3-60 heteroaryl; Ar2 = H, (un)substituted C6-60 aryl, C3-60 heteroaryl, C1-20 alkyl, or C1-20 alkoxy, provided that either Ar1 or Ar2 represents a (un)substituted C10-60 condensed ring or C3-60 monohetero condensed ring; L1,2 = single bond, (un)substituted C6-60 arylene, C3-60 heteroarylene, or fluorenylene; R = H, (un)substituted C6-60 aryl, C3-60 heteroaryl, C1-20 alkyl, or C1-20 alkoxy; n = integer of 0 to 5; if n > 2, adjacent R's may join to form aliphatic or aromatic rings]. 808111-97-9 864541-08-2 881887-26-9

IT 808111-97-9 864541-08-2 881887-26-9
RL: TEM (Technical or engineered material use); USES (Uses)
(organic electroluminescent element)

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RN 808111-97-9 CAPLUS

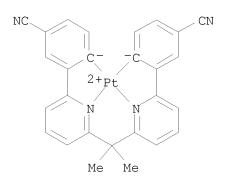
CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 34 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:530402 CAPLUS

DOCUMENT NUMBER: 152:537678

TITLE: Organic electroluminescent element

INVENTOR(S):
Hayashi, Masayuki

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 171pp.; Chemical Indexing Equivalent

GΙ

to 152:537783 (JP)

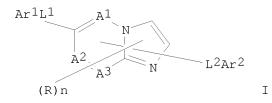
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.				KIND DAT			DATE APPLICATION NO.						DATE				
	WO	2010	0472	 79		A1 2		20100429			 WO 2	009-	 JP67	P67902			 0091	016
		W:	ΑE,	AG,	AL,	AM,	AO,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CL,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,
			ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,
			KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
			ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PE,	PG,
			PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	ST,	SV,	SY,
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ZA,	ZM,	ZW	
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,	HU,
			ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MK,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
			SK,	SM,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
			SN,	TD,	ΤG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,
			ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	$_{ m MT}$					
	JΡ	2010	1033	06		A		2010	0506		JP 2	-800	2733	8 0		2	0081	023
PRIOF	RITY	APP:	LN.	INFO	.:						JP 2	-800	2733	08		A 2	0081	023
OTHER SOURCE(S):					MAR:	PAT	152:	5376	78									



Disclosed is an organic electroluminescent element that comprises a luminescent layer containing an electron transport phosphorescent material, a cathode, and an electron transport layer provided between the luminescent layer and the cathode, where in the electron transport layer contains a N-containing heterocyclic compound I [A1-3 = N or C; Ar1 = aryl or heteroaryl; Ar2 = H, aryl, heteroaryl, alkyl, or alkoxy, provided that any one of Ar1 and Ar2 represents a condensed ring group or a monohetero condensed ring group; L1,2 = single bond, arylene, heteroarylene, or fluorenylene; R = H, aryl, heteroaryl, alkyl, or alkoxy; n = integer of 0 to 5.].

IT 808111-97-9 864541-08-2 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent element)

RN 808111-97-9 CAPLUS

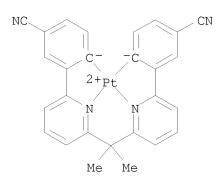
CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 35 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:412939 CAPLUS

DOCUMENT NUMBER: 152:443958

TITLE: Polyheterocyclic organic electroluminescent devices

INVENTOR(S):
Takada, So

GΙ

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 65pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2010074111	A	20100402	JP 2008-243383	20080922
PRIORITY APPLN. INFO.:			JP 2008-243383	20080922
OTHER SOURCE(S):	MARPAT	152:443958		

 $\begin{array}{c|c}
 & Q^1 \\
\hline
Q^2 & -L^2 \\
\hline
L^1 & Q^3
\end{array}$

Ι

AB The title polyheterocyclic organic electroluminescent device has ≥1 organic electroluminescent layer(s) bound between a pair of electrodes, wherein the organic electroluminescent layer(s) contain (1) a polyheterocyclic organic electroluminescent material [I: Q1-3 = aromatic hydrocarbon ring, aromatic heterocyclic ring; L1-2 = CR11, N, P, SiR12; C11-12 = H, substituent] and (2) a phosphorescent material. Polyheterocyclic organic electroluminescent materials provides the organic electroluminescent devices with excellent emission efficiency and excellent emission coloring.

IT 881887-26-9

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(electroluminescent material; polyheterocyclic organic electroluminescent devices)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 36 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:274962 CAPLUS

DOCUMENT NUMBER: 152:322352

TITLE: Organic electroluminescent devices having high

luminous efficiency and low driving voltage and

employing nitrogen-containing heterocyclic

phosphorescent compounds

INVENTOR(S):
Fukuzaki, Eiji

PATENT ASSIGNEE(S): Fujifilm Corp., Japan

SOURCE: U.S. Pat. Appl. Publ., 68pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20100051928	A1	20100304	US 2009-554338		20090904
JP 2010087496	A	20100415	JP 2009-203152		20090902
PRIORITY APPLN. INFO.	•		JP 2008-227269	A	20080904
ACCICNMENT HICTORY FOR	יווס סמידיוו	ם זמת דד תלות יו	TM ICHC DICDIAV	FODMAT	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 152:322352

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$$\begin{bmatrix} z_{12} \\ R_{11} \\ R_{11} \end{bmatrix}$$

AB Organic electroluminescent devices having high luminous efficiency and low driving voltage are described which comprise a pair of electrodes; and at least one organic layer including a light emitting layer, the light emitting layer being provided between the pair of electrodes, where at least one layer of the at least one organic layer contains a compound represented by

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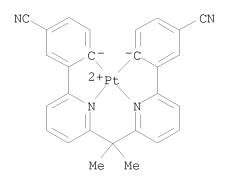
formula (I), where each of Z11 and Z12 independently represents an aromatic heterocyclic ring or an aromatic hydrocarbon ring; R11 represents a hydrogen atom or a substituent, provided that a plurality of R11s are the same or different; m represents an integer of 1 or more; and L1 represents a single bond or an m-valent linking group and is linked to any one of C atoms in R11, Z11 and Z12, provided that when m is 1, L1 does not exist. 881887-26-9

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(light-emitting layer containing; organic electroluminescent devices having high luminous efficiency and low driving voltage and employing nitrogen-containing heterocyclic phosphorescent compds.)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 37 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2010:274249 CAPLUS

DOCUMENT NUMBER: 152:346987

TITLE: Color electroluminescent display and method for

producing the same Sakamoto, Yoshiaki

PATENT ASSIGNEE(S): FujiFilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 23pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 20100053038	A1	20100304	US 2009-506273	20090721		
JP 2010056016	A	20100311	JP 2008-221880	20080829		
PRIORITY APPLN. INFO.:			JP 2008-221880 A	20080829		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A color display is described which includes a plurality of pixels on a substrate, each pixel being area-divided into plural sub-pixels including at least two sub-pixels that each emit colored light of different wavelengths and a white sub-pixel, wherein the at least two sub-pixels and the white sub-pixel each have at least an optical path length-adjusting layer and an organic electroluminescent layer interposed between a layer that partially transmits light and partially reflects light and a light reflection layer to form a resonator structure.

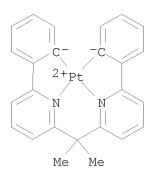
IT 808111-97-9

CN

RL: TEM (Technical or engineered material use); USES (Uses) (color electroluminescent display containing white light-emitting subpixels for rich color reproduction and gradation)

808111-97-9 CAPLUS RN

> Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



ANSWER 38 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

2010:265564 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 152:322707

TITLE: Color electroluminescent display device and method for

manufacturing the same

INVENTOR(S): Kinoshita, Masaru PATENT ASSIGNEE(S): Fujifilm Corp., Japan SOURCE: Eur. Pat. Appl., 28pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 2159843	A2 2010030	3 EP 2009-10980	20090827
R: AT, BE, BG,	CH, CY, CZ, DE	, DK, EE, ES, FI, FR, GE	3, GR, HR, HU,
IE, IS, IT,	LI, LT, LU, LV	, MC, MK, MT, NL, NO, PI	J, PT, RO, SE,
SI, SK, SM,	TR, AL, BA, RS		
JP 2010056017	A 2010031	1 JP 2008-221881	20080829
US 20100052524	A1 2010030	4 US 2009-544239	20090820
CN 101661951	A 2010030	3 CN 2009-10170452	20090826
PRIORITY APPLN. INFO.:		JP 2008-221881	A 20080829
ASSIGNMENT HISTORY FOR U	S PATENT AVAILA	BLE IN LSUS DISPLAY FORM	1AT

Disclosed is a color display device containing plural pixels on a substrate, each pixel is composed of plural sub-pixels which emit lights different in wavelength in the visible range and a white sub-pixel, the plural sub-pixels and the white sub-pixel each have a white organic electroluminescence layer interposed between an optically semitransparent reflection layer and a light reflection layer, the optical distance between the optically semitransparent reflection layer and the light reflection layer in each of the plural sub-pixels forms a resonator having a distance for resonating emitted light, and the optical distance between

the optically semitransparent reflection layer and the light reflection layer in the white sub-pixel is longer than the maximum optical distance between the optically semitransparent reflection layer and the light

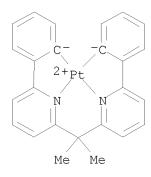
reflection layer in each of the plural sub-pixels.

IT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (color electroluminescent display device and method for manufacturing the same)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 39 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1598341 CAPLUS

DOCUMENT NUMBER: 152:107817

TITLE: Organic electroluminescent device

INVENTOR(S):
Ise, Toshihiro

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 38pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 2009302152	A	20091224	JP 2008-152244	20080610		
PRIORITY APPLN. INFO.:			JP 2008-152244	20080610		
OTHER SOURCE (S) .	маррат	152.107817				

OTHER SOURCE(S): MARPAT 152:107817

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- AB The invention refers to an organic electroluminescent device comprising a metal complex I [Q1-4=a] groups able to form a covalent bond with Pt; R1-4, R11-13, R21-23, R31-33, R41-43 = H or substituent; n = 0 6] in the organic layer.
- RN 1202171-63-8 CAPLUS
- CN Platinum, [μ -[(1,2-dimethyl-1,2-ethanediylidene)tetrakis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C1]]]di- (CA INDEX NAME)

- RN 1202171-64-9 CAPLUS
- CN Platinum, [μ -[(1,3-dimethyl-1,3-propanediylidene)tetrakis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C1]]]di- (CA INDEX NAME)

RN 1202171-65-0 CAPLUS

CN Platinum, $[\mu-[(1,5-dimethyl-1,5-pentanediylidene)tetrakis[(6,2-pyridinediyl-<math>\kappa$ N)-2,1-phenylene- κ Cl]]]di- (CA INDEX NAME)

RN 1202171-66-1 CAPLUS

CN Platinum, [μ -[(1,2-dimethyl-1,2-ethanediylidene)tetrakis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C1)]]]di- (CA INDEX NAME)

PAGE 2-A

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1202171-67-2 CAPLUS RN

Platinum, [μ -[(1,3-dimethyl-1,3-propanediylidene)tetrakis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C1)]]]di- (CA INDEX NAME) CN

PAGE 2-A

RN 1202171-68-3 CAPLUS

CN Platinum, $[\mu-[(1,5-dimethyl-1,5-pentanediylidene)tetrakis[(6,2-pyridinediyl-<math>\kappa$ N)(3,5-difluoro-2,1-phenylene- κ C1)]]]di- (CA INDEX NAME)

PAGE 2-A

ANSWER 40 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

2009:1365572 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 151:539991

TITLE: Organic electroluminescent device

Ise, Toshihiro; Sano, Satoshi; Murakami, Takeshi Fujifilm Corporation, Japan INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE: Jpn. Kokai Tokkyo Koho, 106pp.

CODEN: JKXXAF

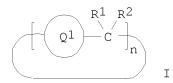
DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 2009260286	A	20091105	JP 2009-53876	20090306		
PRIORITY APPLN. INFO.:			JP 2008-74723 A	20080321		
OTHER SOURCE(S):	MARPAT	151:539991				



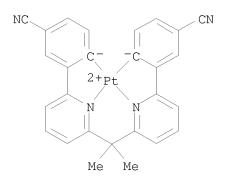
AB The invention relate to an organic electroluminescent device, comprising a compound represented by I $[n = integer \ge 3; Q1 = benzene ring and aromatic heterocyclic single ring; and R1 and R2 = H and substituent].$

IT 881887-26-9
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material
 use); USES (Uses)

(organic electroluminescent device)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 41 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1202344 CAPLUS

DOCUMENT NUMBER: 151:414282

TITLE: Organic electroluminescent device

INVENTOR(S):
Fukuzaki, Eiji

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 101pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 2009224762	A	20091001	JP 2009-2057	20090107		
PRIORITY APPLN. INFO.:			JP 2008-36434 A	20080218		
OTHER SOURCE(S):	MARPAT	151:414282				

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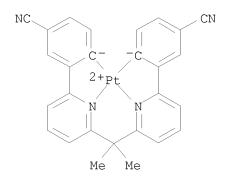
AB The invention relates to an organic electroluminescent device, comprising the compound represented by I [Z1 = aromatic heterocyclic residue; Z2 = aromatic heterocyclic residue and aromatic hydrocarbon ring residue; Z3 = divalent linking group and single bond; R111 = H and substituent group] and a Pt complex containing a tetradentate ligands.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 42 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1135632 CAPLUS

Ι

DOCUMENT NUMBER: 151:369636

TITLE: Organic electroluminescent device

INVENTOR(S): Kitamura, Yoshitaka; Tobiyo, Manabu; Kinoshita, Masaji

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 88pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 2009212235	A	20090917	JP 2008-52505	20080303		
PRIORITY APPLN. INFO.:			JP 2008-52505	20080303		
		and the second second				

AB The invention refers to an organic electroluminescent device comprising a luminescent layer and a electron transport layer between a cathode and an anode, wherein the luminescent layer contains an electron transporting

in

luminescent material, and a hole transporting host material, and the concentration of the electron transporting luminescent material gradually increases from the anode side to the cathode side, and the electron transport layer contains a hole transporting material and electron transporting material, and the concentration of the hole transporting material

the electron transport layer gradually decreases from the anode side to the cathode side or the concentration of electron transporting material gradually

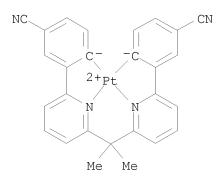
increases from the anode side to the cathode side.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 43 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1080102 CAPLUS

DOCUMENT NUMBER: 151:347264

TITLE: Organic electroluminescent devices using adamantane

derivatives in the charge transport layers

INVENTOR(S): Shibata, Kazuyuki; Sotoyama, Wataru; Tobise, Manabu;

Takeda, Akira

PATENT ASSIGNEE(S): Fujifilm Corp., Japan

SOURCE: U.S. Pat. Appl. Publ., 61pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

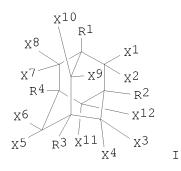
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 20090218936	A1	20090903	US 2009-379517		20090224	
JP 2010161326	A	20100722	JP 2009-37105		20090219	
PRIORITY APPLN. INFO.:			JP 2008-48629	Α	20080228	
			JP 2008-313240	Α	20081209	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 151:347264

GΙ



AB Organic electroluminescent devices comprising ≥1 organic compound layer including a light-emitting layer disposed between a pair of electrodes are described which are provided with a charge transport layer adjacent to the light-emitting layer which contains a charge transporting material and a compound described by the general formula I (R1-4 = independently selected H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, heteroaryl, C1-6 alkoxy, acyl, acyloxy, amino, nitro, cyano, ester, amido, halo, C1-6 perfluoroalkyl, or silyl; ≥1 of R1-4 = a group having a double bond or a triple bond; and X1-12 = independently selected H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, heteroaryl, C1-6 alkoxy, acyl, acyloxy, amino, nitro, cyano, ester, amido, halo, C1-6 perfluoroalkyl, or silyl). The light-emitting material may be a metal complex.

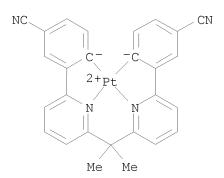
IT 881887-26-9

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent devices using adamantane derivs. in charge transport layers) $\,$

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 44 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1080101 CAPLUS

DOCUMENT NUMBER: 151:347263

TITLE: Organic electroluminescent devices using adamantane

derivatives in the active layer

INVENTOR(S): Sotoyama, Wataru; Shibata, Kazuyuki; Tobise, Manabu;

Takeda, Akira

PATENT ASSIGNEE(S): Fujifilm Corp., Japan

SOURCE: U.S. Pat. Appl. Publ., 98pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

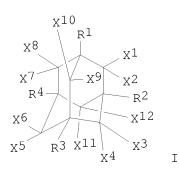
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
	US 20090218935	A1	20090903	US 2009-379489	20090224		
	JP 2010161325	A	20100722	JP 2009-37104	20090219		
PRIO	RITY APPLN. INFO.:			JP 2008-48628 A	20080228		
				JP 2008-315024 A	20081210		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT MARPAT 151:347263

OTHER SOURCE(S):

GΙ



Organic electroluminescence devices which comprise ≥ 1 organic compound AΒ layer including a light-emitting layer disposed between a pair of electrodes are described in which the light-emitting layer includes a light-emitting material, a charge transporting material, and a compound described by the general formula I (R1-4 = independently selected H, C1-6alkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, heteroaryl, C1-6 alkoxy, acyl, acyloxy, amino, nitro, cyano, ester, amido, halo, C1-6 perfluoroalkyl, or silyl; ≥ 1 of R1-4 = a group having a double bond or a triple bond; and X1-12 = independently selected H, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, heteroaryl, C1-6 alkoxy, acyl, acyloxy, amino, nitro, cyano, ester, amido, halo, C1-6 perfluoroalkyl, or silyl). The light-emitting material may be a metal complex.

808111-97-9 881887-26-9 ΤТ

> RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

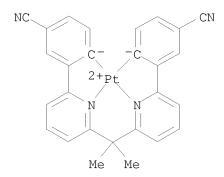
(organic electroluminescent devices using adamantane derivs. in the active layer)

808111-97-9 CAPLUS RN

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-CN phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 45 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1079992 CAPLUS

DOCUMENT NUMBER: 151:325126

TITLE: Organic electroluminescence element having double electroluminescent layers with electron transporting

and hole transporting light-emitting materials with

different ratio

INVENTOR(S): Kitamura, Yoshitaka; Tobise, Manabu; Kinoshita, Masaru

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 52pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO. KIND DA		DATE	APP:	LICATION NO.	DATE		
						_		
	US 20090218561	A1	20090903	US :	2009-379329		20090219	
	JP 2009211892	A	20090917	JP :	2008-52504		20080303	
PRIO:	RITY APPLN. INFO.:			JP :	2008-52504	Α	20080303	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB An organic electroluminescence element is described comprising at least two light-emitting layers disposed between an anode and a cathode, wherein the at least two light-emitting layers include a light-emitting layer A that contains an electron transporting light-emitting material and a hole transporting host material, wherein a concentration of the electron transporting

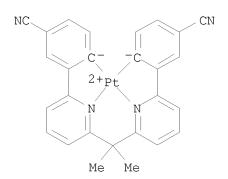
ΙT

light-emitting material gradually increases from an anode side toward a cathode side of the light-emitting layer A, and a light-emitting layer B that contains a hole transporting light-emitting material and an electron transporting host material, wherein a concentration of the hole transporting light-emitting material gradually decreases from an anode side toward a cathode side of the light-emitting layer B. An organic EL element with high light-emission efficiency and excellent durability is provided. 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (electroluminescent layer host; organic electroluminescence element having double electroluminescent layers with electron transporting and hole transporting light-emitting materials with different ratio)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



ANSWER 46 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1073405 CAPLUS

DOCUMENT NUMBER: 151:325093

TITLE: Organic electroluminescence device having organic

layers contains hydrocarbon compound having alkyl

structure and charge transporting material Takeda, Akira; Tobise, Manabu; Satou, Tasuku

INVENTOR(S): PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Eur. Pat. Appl., 46pp.

CODEN: EPXXDW

DOCUMENT TYPE: Pat.ent. LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.				KIND DATE		•	APPLICATION NO.					DATE					
	EP 2096690 EP 2096690			A2 20090902 A3 20110119				EP 2009-2857					20090227					
		R:	ΙE,	IS,	IT,	,	LT,	•	,			ES, MT,						
	US CN	2009 2009 1015	2318 0218 2126	07 938 4	ır,	A A1 A	ŕ	2009 2009 2009	0903 0902		US CN	2009- 2009- 2009-	3922 1012	89 6609		2	0090 0090 0090	225 227
PRIOR		2009 APP			.:	А		2009	0902		JP	2009- 2008- 2009-	4850	9	·-	A 2	0090 0080 0090	228

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

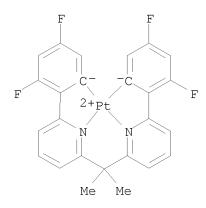
AB An organic electroluminescence device is described comprising a pair of electrodes; and at least one organic layer including a light-emitting layer being provided between the pair of electrodes, wherein at least any one of the at least one organic layer contains both at least one hydrocarbon compound having an alkyl structure and a charge transporting material.

IT 864541-08-2 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)
(light emitting material; organic electroluminescence device having organic layers contains hydrocarbon compound having alkyl structure and charge transporting material for preferably lowering driving voltage)

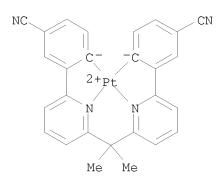
RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L8 ANSWER 47 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:1028742 CAPLUS

DOCUMENT NUMBER: 151:381856

TITLE: Norbornene-Based Copolymers Containing Platinum

Complexes and Bis(carbazolyl)benzene Groups in Their

Side-Chains

AUTHOR(S): Feng, Ke; Zuniga, Carlos; Zhang, Ya-Dong; Kim,

Dongwook; Barlow, Stephen; Marder, Seth R.; Bredas,

Jean Luc; Weck, Marcus

CORPORATE SOURCE: School of Chemistry and Biochemistry, Georgia

Institute of Technology, Atlanta, GA, 30332, USA

SOURCE: Macromolecules (Washington, DC, United States) (2009),

42(18), 6855-6864

CODEN: MAMOBX; ISSN: 0024-9297

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 151:381856

AB Two norbornene-functionalized tetradentate cyclometalated platinum(II)

complexes were synthesized and copolymd. with a

bis(carbazolyl)benzene-based comonomer using ring-opening metathesis

polymerization (ROMP). The copolymers are soluble in common solvents and the $\mbox{mol.}$

wts. of these copolymers can be well controlled as a result of the living character of the ROMP. The photophys. and electrochem. properties of the copolymers were compared to their corresponding small mols. The copolymers showed almost identical photophys. and electrochem. properties demonstrating the inertness of the polymer backbone toward the photophys. properties of the tethered platinum complexes. All complexes exhibit bright photoluminescence in the green region with lifetimes around 0.4 μs and solution phosphorescence quantum efficiencies as high as 0.56, which suggest that these materials could be interesting for OLED applications.

IT 1187677-42-4P 1187677-48-0P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystal structure; norbornene-based copolymers containing platinum complexes and bis(carbazolyl)benzene groups in their side-chains)

RN 1187677-42-4 CAPLUS

CN Platinum, [(1-methoxyethylidene)bis[(2,6-pyridinediyl- κ N)(4,6-difluoro-1,2-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1187677-48-0 CAPLUS

CN Platinum, [(1-fluoroethylidene)bis[(2,6-pyridinediyl- κ N)(4,6-difluoro-1,2-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

IT 1187677-52-6P 1187677-53-7P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (norbornene-based copolymers containing platinum complexes and bis(carbazolyl)benzene groups in their side-chains)

RN 1187677-52-6 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-methoxyhexylidene)bis[(2,6-pyridinediyl-κN)(4,6-difluoro-1,2-phenylene-κC)]]-, (SP-4-2)-, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 3,5-di-9H-carbazol-9-ylbenzoate (CA INDEX NAME)

CM 1

CRN 1187677-47-9 CMF C36 H32 F4 N2 O Pt CCI CCS

CM 2

CRN 1167996-20-4 CMF C39 H30 N2 O2

RN 1187677-53-7 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-fluorohexylidene)bis[(2,6-pyridinediyl- κ N)(4,6-difluoro-1,2-phenylene- κ C)]]-, (SP-4-2)-, polymer with bicyclo[2.2.1]hept-5-en-2-ylmethyl 3,5-di-9H-carbazol-9-ylbenzoate (CA INDEX NAME)

CM 1

CRN 1187677-51-5 CMF C35 H29 F5 N2 Pt CCI CCS

CM 2

CRN 1167996-20-4 CMF C39 H30 N2 O2

IT 1187677-47-9P 1187677-51-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

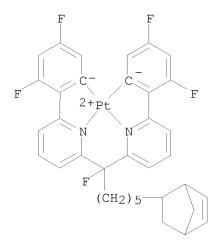
(norbornene-based copolymers containing platinum complexes and bis(carbazolyl)benzene groups in their side-chains)

RN 1187677-47-9 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-methoxyhexylidene)bis[(2,6-pyridinediyl-κN)(4,6-difluoro-1,2-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1187677-51-5 CAPLUS

CN Platinum, [(6-bicyclo[2.2.1]hept-5-en-2-yl-1-fluorohexylidene)bis[(2,6-pyridinediyl- κ N)(4,6-difluoro-1,2-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 48 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:732579 CAPLUS

DOCUMENT NUMBER: 151:89517

TITLE: Platinum complex compound and organic

electroluminescence device using the same

INVENTOR(S): Kinoshita, Ikuo; Murakami, Takeshi; Igarashi, Tatsuya

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: Eur. Pat. Appl., 53pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PA	PATENT NO.						ND DATE APPLICATION NO.							DATE			
	2070 2070				A1 B1		2009 2010			EP 2	008-	2162	3		2	0081	212
	R:	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,	HU,
		ΙE,	IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	AL,	ΒA,	MK,	RS										
JP	2009	1615	24		A		2009	0723		JP 2	008-	3157	88		2	0081	211
US	2009	0153	045		A1		2009	0618		US 2	008-	3333	70		2	0081	212
AT	4691	.60			${f T}$		2010	0615		AT 2	-800	2162	3		2	0081	212
PRIORIT	Y APF	LN.	INFO	. :						JP 2	007-	3236	82	i	A 2	0071	214
ASSIGNM	ENT H	IISTO:	RY F	OR U	S PA	TENT	' AVA	ILAB:	LE I	N LS	US D	ISPL	AY F	ORMA'	Τ		
OTHER S	OURCE	(S):			MAR:	PAT	151:	8951	7								

AB The invention refers to a platinum complex compound I [Ar1,2 = aromatic ring or aromatic heterocyclic; R1-4 = H or substituent; Z1,2 = C or N; Q1 = aromatic or aromatic heterocycle containing C atom and Z1, and Q2 = aromatic or aromatic heterocycle ring containing C atom and Z2; and A1 = single bond or divalent linking group].

IT 1160958-76-8 1160958-78-0 1160958-80-4 1160958-81-5

Ι

RL: TEM (Technical or engineered material use); USES (Uses) (platinum complex compound and organic electroluminescence device using the same)

RN 1160958-76-8 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(5-phenyl-6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 1160958-78-0 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(5-phenyl-6,2-pyridinediyl- κ N)(4-fluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1160958-80-4 CAPLUS

CN Platinum, [(1-methylethylidene)bis[[5-(1H-imidazol-1-yl)-6,2-pyridinediyl- κ N](5-fluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 1160958-81-5 CAPLUS

CN Platinum, [(diphenylmethylene)bis[[5-[4-(trifluoromethyl)phenyl]-6,2-pyridinediyl- κ N][4-(trifluoromethyl)-2,1-phenylene- κ C]]]-, (SP-4-2)- (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 49 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:455239 CAPLUS

DOCUMENT NUMBER: 150:460455

TITLE: Organic field emission element with improved

durability and efficiency containing platinum complex

and silane derivative

INVENTOR(S): Fukuzaki, Eiji; Igarashi, Tatsuya PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 92pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009081409	A	20090416	JP 2008-46317	20080227

PRIORITY APPLN. INFO.: JP 2007-119534 A 20070427 JP 2007-229024 A 20070904

OTHER SOURCE(S): MARPAT 150:460455

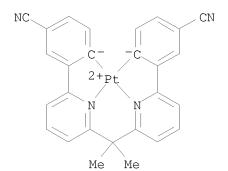
GΙ

AB Disclosed is an organic field emission element such as an organic EL element containing between a pair of electrodes a silane derivative represented by I (R101-108 = H, substituent) and a Pt complex having a tetradentate ligand.

IT 881887-26-9
 RL: TEM (Technical or engineered material use); USES (Uses)
 (Organic field emission element with improved durability and efficiency containing platinum complex and silane derivative)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 50 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:138827 CAPLUS

DOCUMENT NUMBER: 150:202540

TITLE: Organic electroluminescent devices with graded

concentrations of electron-transporting light-emitting

materials in hole-transporting hosts Kinoshita, Masaru; Tobise, Manabu

INVENTOR(S): Kinoshita, Masaru; Tobise, M

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 75pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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20090205
                                           WO 2008-JP63813
     WO 2009017210
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                                                                    20080725
            AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG,
             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
             MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
             PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM,
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                                20090212
     JP 2009032977
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                          Α
     EP 2174363
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             SK, TR, AL, BA, MK, RS
     KR 2010066445
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                                20100617
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                                                                    20080725
     CN 101836308
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                                20100915
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PRIORITY APPLN. INFO.:
                                            JP 2007-196527
                                                                    20070727
                                                                 Α
                                            WO 2008-JP63813
                                                                    20080725
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 150:202540

AB Organic electroluminescent device comprising an anode, a cathode disposed facing the anode, and an organic layer that is sandwiched between the anode and the cathode and that includes at least a light-emitting layer are described in which the light-emitting layer comprises an electron-transporting light-emitting material, a hole-transporting host material, and an elec. inert material, and the concentration of the electron-transporting light-emitting material gradually decreases from a cathode side toward an anode side. Preferably, the concentration of the elec. inert material also gradually decreases from the cathode side toward the anode side.

IT 881887-26-9

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent devices with graded concns. of electron-transporting light-emitting materials in hole-transporting hosts)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

9

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 51 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:116715 CAPLUS

DOCUMENT NUMBER: 150:155944

TITLE: Organic electroluminescent elements with high

light-emission efficiency and excellent durability employing multiple light-emitting materials having different electron affinities and gradially changing

compositions

INVENTOR(S): Satou, Tasuku; Kinoshita, Masaru; Tobise, Manabu

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 28 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	DATE	
US 20090026936	A1	20090129	US 2008-177951	20080723
US 7847479	B2	20101207		
JP 2009055010	A	20090312	JP 2008-188629	20080722
PRIORITY APPLN. INFO.:			JP 2007-196677 A	20070727

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Organic electroluminescence elements are described which comprise a light-emitting layer between a pair of electrodes, where the light-emitting layer contains at least two light-emitting materials having different Ea values and at least one host material, a concentration of a light-emitting material having a larger Ea value in the light-emitting layer gradually decreases from a cathode side toward an anode side, and a concentration of a light-emitting material having a smaller Ea value in the light-emitting layer gradually decreases from the anode side toward the cathode side.

IT 881887-26-9

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(light-emitting layer containing; organic electroluminescent elements employing multiple light-emitting materials having different electron affinities)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 52 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2009:85882 CAPLUS

DOCUMENT NUMBER: 150:179579

TITLE: Organic electroluminescent device

INVENTOR(S):
Okada, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 97pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2009016184 PRIORITY APPLN. INFO.:	A	20090122	JP 2007-176762 JP 2007-176762	20070704 20070704
PRIORITY APPLN. INFO.:			JP 2007-176762	2007070

AB The invention refers to an organic electroluminescent device comprising two or more luminescent units between two electrodes, wherein the intermediate connecting layer between the luminescent units, and each of the luminescent units have organic layers which contain a luminescent layer, and the light from the luminescent units combine to create white light.

IT 864541-08-2 881887-26-9 930778-68-0

1104389-25-4

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 930778-68-0 CAPLUS

CN Platinum, (3,5,9,11-tetrafluoro-7,7,18,18-tetramethyl-23,24-diazapentacyclo[17.3.1.12,6.18,12.113,17]hexacosa-1(23),2,4,6(26),8,10,12(25),13,15,17(24),19,21-dodecaene-25,26-diyl- κ C25, κ C26, κ N23, κ N24)-, (SP-4-2)- (CA INDEX NAME)

RN 1104389-25-4 CAPLUS

CN Platinum, $(14,14,29,29-\text{tetramethyl}-14\text{H},29\text{H}-7,13:15,21-\text{dimetheno}-6,30:22,28-\text{dinitrilotetrabenzo}[a,f,k,p]\text{cyclodocosene}-33,34-\text{diyl}-\kappa\text{C33},\kappa\text{C34},\kappa\text{N31},\kappa\text{N32})-$, (SP-4-2)- (CA INDEX NAME)

L8

ACCESSION NUMBER: 2008:1280630 CAPLUS

DOCUMENT NUMBER: 149:502651

TITLE: Organic electroluminescent display device and

patterning method

INVENTOR(S): Matsunaga, Atsushi; Nakayama, Masaya; Tanaka, Atsushi

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 43pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIN	D DATE				APPLICATION NO.					DATE 			
WO	2008	 1268:	83		A1	_	2008	1023		 WO 2	008-	 JP57	 053		2	0080	403	
	W:	ΑE,	AG,	AL,	AM,	AO,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	
		FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,	KG,	
		ΚM,	KN,	KΡ,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW					
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,	
		ΙE,	IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	
		ΤG,	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	
		ΑM,	ΑZ,	,	,		MD,		,									
	2008						2008						-			0080		
KR	2009	1285	35		А		2009	1215		KR 2	009-	7023	094		2	0800	403	
EP	2135.	288			A1		2009	1223		EP 2	008-	7401	54		2	0800	403	
	R:						CZ,						•					
		ΙE,	IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	MT,	ΝL,	NO,	PL,	PT,	RO,	SE,	SI,	
		SK,	TR															
CN	1016	4179	4		Α		2010	0203		CN 2	008-	8000	9705		_	0090		
US	2010	0073:	268		A1		2010	0325		US 2	009-	5945	41		2	0091	002	
RIORIT	Y APP	LN.	INFO	.:						JP 2	007 - 9	9951	6		A 2	0070	405	
										WO 2	008-	JP57	053	1	W 2	0800	403	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

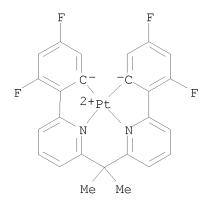
AB An organic electroluminescent display device includes a driving TFT and pixels which are formed by organic electroluminescent elements and provided in a pattern on a substrate of the TFT. The driving TFT includes at least a substrate, a gate electrode, a gate insulating film, an active layer, a source electrode, and a drain electrode; the driving TFT further includes a resistive layer between the active layer and at least one of the source electrode and the drain electrode; and the pixels are formed in a pattern by a laser transfer method. A patterning method by a laser transfer method for producing the fine pixels is also provided.

IT 864541-08-2

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent display device and patterning method)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 54 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:1188420 CAPLUS

DOCUMENT NUMBER: 149:435443

TITLE: Organic electroluminescence element

INVENTOR(S): Satou, Tasuku; Fukunaga, Hirofumi; Tobise, Manabu

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 38 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20080241518	A1	20081002	US 2008-54147		20080324
JP 2008270729	A	20081106	JP 2008-26984		20080206
PRIORITY APPLN. INFO.:			JP 2007-80253	Α	20070326
			JP 2008-26984	Α	20080206

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 149:435443

AB Organic electroluminescent element comprising at least one organic layer including a light-emitting layer between a pair of electrodes are described in which the element includes an electron transport layer containing a phosphine oxide compound and an electron transport layer that does not contain the phosphine oxide compound between the light-emitting layer and a cathode, the electron transport layer containing the phosphine oxide compound being nearer to the cathode while the electron transport layer that does not substantially contain the phosphine oxide compound is nearer to the light-emitting layer.

IT 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent devices with phosphine oxide compound-containing and

phosphine oxide-compound free dual electron transport layers)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 55 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:1185550 CAPLUS

DOCUMENT NUMBER: 149:435442

TITLE: Organic electroluminescent devices with layers

including deuterated carbazole derivatives and

platinum complexes

INVENTOR(S): Takeda, Akira

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE		APPLICATION NO.						D.	ATE	
	WO	2008	 1178	 89		A1	_	2008	1002							2	0080	 326
		W:	ΑE,	AG,	AL,	AM,	AO,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
			FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,
			KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
			MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
			PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
			TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HR,	HU,
			ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,	SK,
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,
			ΤG,	BW,	GH,	GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
			AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM							
	JΡ	2009	2315	16		Α		2009	1008		JP 2	-800	7473	0		2	0800	321
	EP	2129	739			A1		2009	1209		EP 2	-800	7396	43		2	0080	326
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HR,	HU,
			ΙE,	IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	SI,
			SK,	TR														
	KR	2010	0146	03		Α		2010	0210		KR 2	009-	7020	119		2	0080	326
		2010						2010									0090	923
	CN	1016	4674	5		Α		2010	0210		CN 2	008-	8001	0315		2	0090	928
PRIOF	RIT:	Y APP	LN.	INFO	.:						JP 2	007-	8596	1		A 2	0070	328
											JP 2	008-	4851	1		T0 2	0080	228
											WO 2	008-	JP56	532	1	W 2	0080	326
ASSIG	MIN	ENT H	ISTO:	RY F	OR U	S PA'	TENI	AVA	ILAB:	LE I	N LS	US D	ISPL.	AY F	ORMA'	Τ		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 149:435442; MARPAT 149:435442

GΙ

AB Organic electroluminescent devices comprising a pair of electrodes; and at least one organic layer between the pair of electrodes, the at least one organic

layer including a light-emitting layer are described in which the organic layer(s) contain a compound are described by the general formula I (R1-8 = independently selected H or a substituent, and contiguous groups of R1-8 may be bonded to each other to form a condensed ring; R9 = alkyl, alkenyl, aryl, heteroaryl, or silyl, and each group may be substituted with substituent; and ≥ 1 R1-9 = deuterium or a substituent containing deuterium) and the light-emitting layer contains a phosphorescent platinum complex having a tetradentate ligand.

IT 864541-08-2 881887-26-9

Ι

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent devices with layers including deuterated carbazole derivs. and platinum complexes)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 56 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:674480 CAPLUS

DOCUMENT NUMBER: 149:41393

TITLE: Organic electroluminescent device containing

indole-based light-emitting layer Igarashi, Tatsuya; Yagi, Kazunari

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 101pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

P	PATENT NO.					D	DATE APPLICATION NO.			NO.		DATE					
M(2008 C	 30661	 92		A1	_	2008	0605		WO 2	007-	JP73.	 274		2	0071	 127
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,	KM,
		KN,	ΚP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	MG,
		MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,
		RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,	TR,
		TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW					
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		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									
J1	P 2008	31600	87		Α		2008	0710		JP 2	007-	3034	67		2	0071	122
E.	P 2102	2308			A1		2009	0923		EP 2	007-	8499	77		2	0071	127
	R:	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR
U	S 2010	0026	174		A1		2010	0204		US 2	009-	5162	59		2	0090	526
PRIORI'	RIORITY APPLN. INFO.:									JP 2	006-	3187	71	1	A 2	0061	127
										WO 2007-JP73274					W 2	0071	127
ASSIGNI	SSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT																

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 149:41393

GΙ

AB An organic electroluminescent device is described comprising a pair of electrodes; and at least one organic layer between the pair of electrodes, the at least one organic layer including a light-emitting layer, wherein the at least one organic layer includes at least one layer containing an indole derivative represented by general formula I, and the light-emitting layer includes a platinum complex phosphorescent material having a tetradentate ligand, wherein R101-R107 each independently represents a hydrogen atom or a substituent, provided that R102-R103 are not bonded to each other to form an aromatic condensed ring.

IT 808111-97-9 864541-08-2 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses)

(light emitting layer; organic electroluminescent device containing indole-based light-emitting enhancer)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 57 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:673873 CAPLUS

DOCUMENT NUMBER: 149:66137

TITLE: Organic electroluminescent device and indole

derivative

INVENTOR(S): Igarashi, Tatsuya; Yagi, Kazunari

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan

SOURCE: PCT Int. Appl., 54pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008066195	A1	20080605	WO 2007-JP73278	20071127
W: AE, AG,	AL, AM, AT	, AU, AZ,	BA, BB, BG, BH, BR,	BW, BY, BZ, CA,
CH, CN,	CO, CR, CU	, CZ, DE,	DK, DM, DO, DZ, EC,	EE, EG, ES, FI,
GB, GD,	GE, GH, GM	, GT, HN,	HR, HU, ID, IL, IN,	IS, KE, KG, KM,
KN, KP,	KR, KZ, LA	, LC, LK,	LR, LS, LT, LU, LY,	MA, MD, ME, MG,

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MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT,
             RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR,
             TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
     JP 2009076835
                                            JP 2007-303466
                                20090409
                                                                    20071122
                          Α
     EP 2094810
                                20090902
                                            EP 2007-849981
                                                                    20071127
                          Α1
             AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR
     US 20100066243
                          Α1
                                20100318
                                            US 2009-516495
PRIORITY APPLN. INFO.:
                                            JP 2006-318773
                                                                    20061127
                                            JP 2007-221520
                                                                    20070828
                                                                 Α
                                            WO 2007-JP73278
                                                                 W
                                                                    20071127
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 149:66137

AB An organic electroluminescent device is described comprising a pair of electrodes; and at least one organic layer between the pair of electrodes, the at least one organic layer including a light-emitting layer containing a light-emitting material, wherein the at least one organic layer includes at least one layer containing an indole derivative represented by the general formula

Ι

I wherein R102, R103, R104, R105 and R106 each independently represents a hydrogen atom or a substituent; R101 represents a substituent linking via a carbon atom; R101 and R106 may be bonded to each other to form a ring; R107 represents a substituent; n101 represents 1 or 2; and n102 represents an integer of from 0 to 5, provided that n101 + n102 \leq 6.

IT 808111-97-9 864541-08-2 881887-26-9

RL: TEM (Technical or engineered material use); USES (Uses) (phosphorescent material; organic electroluminescent device having indole derivative organic layer)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

10/578,039

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 58 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2008:550939 CAPLUS

DOCUMENT NUMBER: 148:506352

Organic electroluminescent (EL) elements with TITLE:

excellent durability and efficiency and white-emitting

EL devices using them

INVENTOR(S): Igarashi, Tatsuya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 70pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008108617 PRIORITY APPLN. INFO.:	А	20080508	JP 2006-291334 JP 2006-291334	20061026 20061026

OTHER SOURCE(S): MARPAT 148:506352

The elements have EL layers (A) containing metal complex hosts and phosphors with condensed aromatic ligands and EL layers (B) containing phosphors of Pt complexes with tetradentate ligands.

864541-08-2 ΙT

RL: TEM (Technical or engineered material use); USES (Uses) (phosphor; white-emitting EL devices containing 2 emission layers with good

durability and efficiency) 864541-08-2 CAPLUS RN

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)

ANSWER 59 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

2008:549305 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 148:549261

TITLE: Organic electroluminescent devices containing

prescribed carbazole compounds and tetradentate

phosphorescent complexes

INVENTOR(S): Takeda, Rei

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 35pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO. KIND DATE APPLICATION NO. DATE _____ ____ _____ ______ _____ JP 2008109103 20080508 JP 2007-239609 20070914 Α PRIORITY APPLN. INFO.: JP 2006-263415 A 20060927 OTHER SOURCE(S): MARPAT 148:549261 GΙ

AB The devices, showing improved luminescent efficiency and long service life, have emitting layers containing carbazole derivs. I [Q1-Q4 = C, Si; R0 = H, alkyl, aryl, C-connected heteroaryl; R1 = H; R2-R15 = H, substituent; Z1-Z12 = alkyl, (hetero)aryl] and tetradentate ligand-equipped phosphorescent complexes.

IT 864541-08-2

RL: TEM (Technical or engineered material use); USES (Uses) (emitting layers; organic electroluminescent devices containing prescribed carbazole compds. and tetradentate phosphorescent complexes)

Т

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 60 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN ACCESSION NUMBER: 2008:419446 CAPLUS

DOCUMENT NUMBER: 148:437513

TITLE: Organic electroluminescent element

INVENTOR(S): Satou, Tasuku

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 26pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	DATE APPLICATION NO.					
US 20080079358	A1	20080403	US 2007-902459	20070921				
JP 2008109085	A	20080508	JP 2007-197716	20070730				
PRIORITY APPLN. INFO.:			JP 2006-269485 A	20060929				
			TP 2007-197716 A	20070730				

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

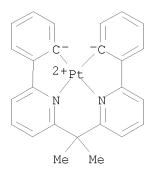
AB An organic electroluminescent element includes at least one organic layer including a light-emitting layer between a pair of electrodes, wherein the light-emitting layer includes a metal complex having a tri-dentate or higher multi-dentate ligand, and a metal-free compound capable of giving a three or higher coordination with the same metal element as a central metal of the metal complex is provided. An organic electroluminescent element having a high light emitting efficiency and excellent durability is provided.

IT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (metal complex; organic electroluminescent element containing)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 61 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:1421312 CAPLUS

DOCUMENT NUMBER: 148:65687

TITLE: Organic electroluminescent device

INVENTOR(S):
Murakami, Takeshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 35pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007324309	A	20071213	JP 2006-151705	20060531
PRIORITY APPLN. INFO.:			JP 2006-151705	20060531
OTHER SOURCE(S):	MARPAT	148:65687		

AB The invention relates to an organic electroluminescent device, comprising a tetradentate ligand-containing metal complex in which, at least, one linking group connecting between coordinating groups to the center metal, contains a specific alkyl group in order to prevent the mol. association that may reduce the luminescent efficiency.

IT 959838-95-0 959838-96-1 959838-97-2
RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 959838-95-0 CAPLUS

CN Platinum, [[3-methyl-1-(2-methylpropyl)butylidene]bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 959838-96-1 CAPLUS

CN Platinum, [[3-methyl-1-(2-methylpropyl)butylidene]bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

RN 959838-97-2 CAPLUS

CN Platinum, [(1,3-dimethylbutylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 62 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:435308 CAPLUS

DOCUMENT NUMBER: 146:431504

TITLE: Organic field emission element made from multidentate

metal complex

INVENTOR(S):
Kitamura, Yoshitaka

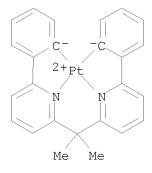
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 149pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD T 0	JP 2007103493	Α	20070419	JP 2005-288903	20050930
	RITY APPLN. INFO.:			JP 2005-288903	20050930
AB		•		element comprising ≥2	_
	emitting units disp	osed be	etween a pair	of electrodes and int	ermediate
	contact layers disp	osed be	etween the li	ght emitting units, wh	erein
	≥2 light emitting u	nits ha	ave independe	ntly an organic compou	nd layer
	including a light e	emitting	g layer and c	ontaining a metal comp	lex with tri- or
	higher-dentate.				
ΙT	808111-97-9				
	RL: TEM (Technical	or engi	neered mater	ial use); USES (Uses)	
	(Organic field e	emissior	n element mad	e from multidentate me	tal complex)
RN	808111-97-9 CAPLUS	S			
CN	Platinum, [(1-methy	lethyli	ldene)bis[(6,	2-pyridinediyl- κ N)-2,1	_
	phenylene- κ C]]-, (S	SP-4-2)-	- (CA INDEX	NAME)	



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 63 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:385414 CAPLUS

DOCUMENT NUMBER: 146:368522

TITLE: Organic electroluminescent element INVENTOR(S): Sano, Satoshi; Igarashi, Tatsuya

PATENT ASSIGNEE(S): Fujifilm Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 22pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				_	
US 20070077453	A1	20070405	US 2006-542550		20061004
JP 2007129206	A	20070524	JP 2006-271604		20061003
PRIORITY APPLN. INFO.:			JP 2005-291145	Α	20051004

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 146:368522

AB Organic electroluminescent elements are described which comprise a pair of electrodes; and at least one organic layer comprising a light-emitting layer between the pair of electrodes, where the at least one organic layer comprises at least one of compds. represented by formula (R1)m-(A1)n, where R1 represents a substituent; m represents an integer of 2 or more; n represents an integer of 1 or more; and A1 represents a group selected from the group consisting of specific compds., with the proviso that when m or n is 2 or more, a plurality of R1's or A1's may be the same or different.

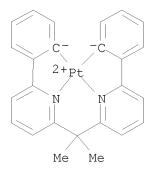
IT 808111-97-9

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(organic electroluminescent elements using)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 64 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:383084 CAPLUS

DOCUMENT NUMBER: 146:390149

TITLE: Organic electroluminescent devices employing a polymer

comprising a metal complex containing a tri- or

higher-dentate ligand

INVENTOR(S):
Okada, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 126pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20070075311	A1	20070405	US 2006-529595		20060929
JP 2007123862	A	20070517	JP 2006-263431		20060927
PRIORITY APPLN. INFO.:			JP 2005-288831	Α	20050930

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 146:390149

Organic electroluminescent devices are described which comprise an organic compound layer provided between a pair of electrodes, which comprises a polymer comprising a metal complex containing a tri- or higher-dentate ligand in the polymer mol. At least one of the ligands is preferably a chain. The metal complex preferably contains a transition metal ion or a rare earth metal ion. The metal complex preferably contains a nitrogen atom in its complex structure. Further, the polymer preferably contains the metal complex in its main chain or its side chain. Thus, green-emitting devices employing platinum organometallic polymers as luminescent materials were demonstrated and characterized.

IT 932397-76-7 932397-77-8

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(luminescent layer; organic electroluminescent devices employing polymer comprising metal complex containing tri- or higher-dentate ligand)

RN 932397-76-7 CAPLUS

CN Platinum, [[[4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]phenylmethylene]bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C1]]-, (SP-4-2)-, homopolymer (CA INDEX NAME)

CM 1

CRN 932397-75-6

CMF C39 H28 N2 O2 Pt CCI CCS

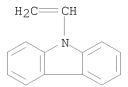
RN 932397-77-8 CAPLUS

CN Platinum, [[[4-[(2-methyl-1-oxo-2-propen-1-yl)oxy]phenyl]phenylmethylene]bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C1]]-, (SP-4-2)-, polymer with 9-ethenyl-9H-carbazole (CA INDEX NAME)

CM 1

CRN 932397-75-6 CMF C39 H28 N2 O2 Pt CCI CCS

CRN 1484-13-5 CMF C14 H11 N



L8 ANSWER 65 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:380659 CAPLUS

DOCUMENT NUMBER: 146:390910

TITLE: Organic electroluminescent device and method for

finely patterning it by laser ablation

INVENTOR(S):
Kitamura, Yoshitaka

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 144pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007087667	A	20070405	JP 2005-272811	20050920
PRIORITY APPLN. INFO.:			JP 2005-272811	20050920

OTHER SOURCE(S): MARPAT 146:390910

AB The device (for display) has, between a pair of electrodes, ≥ 1 of light-emitting layers containing metal complexes bearing ≥ 3 -dentate ligands and is patterned by laser ablation.

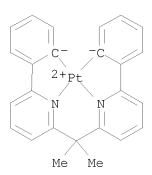
IT 808111-97-9 864541-08-2

RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(dopants, light-emitting layers; method for finely patterning organic electroluminescent device by laser ablation)

RN 808111-97-9 CAPLUS

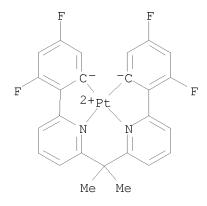
CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-

difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 66 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:356751 CAPLUS

DOCUMENT NUMBER: 146:390112

TITLE: Organic electroluminescent devices with high emission

efficiency and excellent durability and their

manufacture by liquid-phase method

INVENTOR(S): Yamazaki, Kazuki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 143pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007080677	A	20070329	JP 2005-267249	20050914
PRIORITY APPLN. INFO.:			JP 2005-267249	20050914
OTHER SOURCE(S):	MARPAT	146:390112		

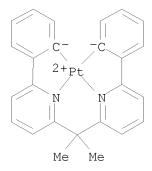
AB The devices have light-emitting layers manufactured by liquid-phase method (coating or printing method, preferably) using ≥ 1 metal complexes with ≥ 3 -dentate ligands.

IT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (light-emitting layer; manufacture of organic EL devices with high emission efficiency and durability by coating or printing method using multidentate ligand-metal complexes)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 67 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:356713 CAPLUS

DOCUMENT NUMBER: 146:390111

TITLE: Organic electroluminescent device

INVENTOR(S): Hasegawa, Kazuhiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 144pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007080593 PRIORITY APPLN. INFO.:	А	20070329	JP 2005-264374 JP 2005-264374	20050912 20050912

AB The invention refers to an organic electroluminescent device comprising an at least one luminescent layer between two electrodes, and a resonator for resonating the light emitted from the luminescent layer, and the luminescent layer contains, as luminescent material, a metal complex having tri- or higher dentate ligands.

IT 930778-68-0

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 930778-68-0 CAPLUS

CN Platinum, (3,5,9,11-tetrafluoro-7,7,18,18-tetramethyl-23,24-diazapentacyclo[17.3.1.12,6.18,12.113,17]hexacosa-1(23),2,4,6(26),8,10,12(25),13,15,17(24),19,21-dodecaene-25,26-diyl-κC25,κC26,κN23,κN24)-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 68 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:286937 CAPLUS

DOCUMENT NUMBER: 146:347119

TITLE: Organic electroluminescent device and complex compound

INVENTOR(S): Takeda, Akira; Igarashi, Tatsuya PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 24pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

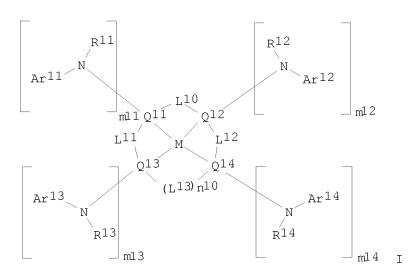
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
US 20070059552	A1	20070315	US 2006-518355		20060911
JP 2007073891	A	20070322	JP 2005-262305		20050909
PRIORITY APPLN. INFO.:			JP 2005-262305	Α	20050909

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 146:347119

GΙ



AB An organic electroluminescent device is described comprising a pair of electrodes; and at least one organic layer between the pair of electrode, the at least one organic layer including a light-emitting layer, wherein the at least one organic layer contains at least one compound represented by the general formula I (where M = a metal ion; Q11, Q12, Q13, Q14 = (independently) atom group coordinating with M; L10, L11, L12, L13 = (independently) a single bond, a double bond or a linking group; lines between the M and each of Q1 group represent one of a covalent bond, an ionic bond, and a coordinate bond; n10 = 0, 1, and when n10=0, Q13 and Q14 do not bond to each other; mli (i = 1,2,3,4) (independently) = integer of 0 or more, and at least one of mli is 1 or more; Arli = (independently) an aryl group or a heteroaryl group; and R1i = (independently) hydrogen atom or a substituent group).

IT 929034-41-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(organic electroluminescent device having platinum complex as phosphorescent layer)

RN 929034-41-3 CAPLUS

CN Platinum, [(1-methylethylidene)bis[[4-(diphenylamino)-6,2-pyridinediyl- κ N](3,5-difluoro-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 69 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:286933 CAPLUS

DOCUMENT NUMBER: 146:325836

TITLE: Composition for organic electroluminescent element,

method for manufacturing organic electroluminescent element, and organic electroluminescent element

INVENTOR(S):
Yamazaki, Kazuki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 126pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070059551	A1	20070315	US 2006-518303	20060911

by

JP 2007110067 A 20070426 JP 2006-47240 20060223
PRIORITY APPLN. INFO.: JP 2005-267556 A 20050914
JP 2005-267557 A 20050914
JP 2006-47240 A 20060223

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 146:325836

AB A composition for an organic electroluminescent element used for forming a pattern

by an ink jet method is described comprising at least one metal complex having a tridentate or higher-dentate ligand. A method of fabricating an organic electroluminescent element including forming an organic compound layer

discharging the composition for an organic electroluminescent element in a pattern

with an ink jet apparatus, is also described entailing using a transfer material having an organic compound layer containing a metal complex having a tridentate or higher-dentate ligand, and organic electroluminescent elements manufactured by these methods.

IT 808111-97-9

RL: TEM (Technical or engineered material use); USES (Uses) (composition for organic electroluminescent element for forming pattern by ink

jet method)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 70 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2007:172434 CAPLUS

DOCUMENT NUMBER: 146:238960

TITLE: Organic electroluminescent device with high emission

efficiency, good drive durability, and low-voltage

drive property

INVENTOR(S):

Okada, Hisashi; Nishida, Nobuhiro
PATENT ASSIGNEE(S):

Fujifilm Holdings Corp., Japan

Jpn. Kokai Tokkyo Koho, 44pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007042875	A	20070215	JP 2005-225568	20050803

PRIORITY APPLN. INFO.:

JP 2005-225568

20050803

AB The organic EL device contains, between a pair of electrode, a hole-transporting layer containing ≥1 kinds of hole-transporting materials, a light-emitting layer containing ≥1 kinds of light-emitting dopants and a plurality of host compds., an electron-transporting layer containing ≥1 kinds of electron-transporting substances, wherein among the host compds., ≥1 kinds comprise hole-transporting host compds. and ≥1 kinds of electron-transporting host compds., between the hole-transporting layer and the light-emitting layer is provided a hole-transporting intermediate layer consisting of the same substance as that of the hole-transporting host compds., and/or between the electron-transporting layer is provided an electron-transporting intermediate layer consisting of the same substance as that of the electron-transporting host compds.

IT 808111-97-9 864541-08-2

RL: MOA (Modifier or additive use); USES (Uses) (light-emitting dopant; organic EL device with high emission efficiency, good drive durability, and low-voltage drive property)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

ACCESSION NUMBER: 2007:63444 CAPLUS

DOCUMENT NUMBER: 146:151494

TITLE: Organic electroluminescent device

INVENTOR(S):
Nariyuki, Fumito

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 23pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				_	
US 20070015004	A1	20070118	US 2006-444422		20060601
JP 2007019471	A	20070125	JP 2006-132548		20060511
PRIORITY APPLN. INFO.:			JP 2005-166817	Α	20050607

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 146:151494

The invention provides an organic electroluminescent device having at least a light-emitting layer containing a light-emitting material and a host material, a hole injection-promoting layer, and a hole-transporting layer containing a hole-transporting material in this order between a pair of electrodes, in which the hole injection-promoting layer contains a hole-transporting material and has a thickness of 0.1 nm to 0.3 nm, and the relation Ip1<Ip2<Ip3 is satisfied, where Ip1 is defined as the ionization potential of the hole-transporting material of the hole-transporting material of the hole-transporting material of the hole injection-promoting layer, and Ip3 is defined as the ionization potential of the hole injection-promoting layer, and Ip3 is defined as the ionization potential of the host material. Accordingly, the invention provides an electroluminescent device excellent in both light emitting efficiency and operation durability.

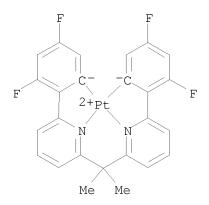
IT 864541-08-2

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(light-emitting layer guest; organic electroluminescent device)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 72 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:1283684 CAPLUS

DOCUMENT NUMBER: 146:53463

TITLE: Organic electroluminescent devices

INVENTOR(S): Kinoshita, Ikuo; Igarashi, Tatsuya; Murakami, Takeshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 26pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 2006332620	 A	20061207	JP 2006-119523	20060424
	US 20060286406	A1	20061221	US 2006-410000	20060425
	US 7758971	B2	20100720		
PRIO	RITY APPLN. INFO.:			JP 2005-126734 A	20050425
ASSI	GNMENT HISTORY FOR U	S PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	• ·
OTHER	R SOURCE(S):	MARPAT	146:53463		
AB	The devices contain	layers	containing	the metal complexes wi	th
	≥3-coordinated liga	nds bet	ween light-e	emitting layers and cat	hodes.
	The devices have im	proved	light emissi	on efficiency.	
ΙT	913699-15-7 913	699-16-	8 916427	7-56-0	
	916427-57-1				
	RL: TEM (Technical	or engi:	neered mater	rial use); USES (Uses)	
	(organic electro	lumines	cent devices	s containing metal comp	lexes with ligands)
RN	913699-15-7 CAPLUS				

CN

RN 913699-16-8 CAPLUS

CN Platinum, [(diphenylmethylene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

Palladium, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 916427-56-0 CAPLUS

CN Platinum, [(diphenylmethylene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C1]]-, (SP-4-2)- (CA INDEX NAME)

RN 916427-57-1 CAPLUS

CN Palladium, [(diphenylmethylene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C1]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L8 ANSWER 73 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:1147252 CAPLUS

DOCUMENT NUMBER: 145:480097

TITLE: Organic electroluminescent devices employing a metal

complex having a multidentate ligand as a host

material

INVENTOR(S): Igarashi, Tatsuya; Murakami, Takeshi PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: PCT Int. Appl., 68pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.		KIN	D	DATE			APPL	ICAT	ION 1	. O <i>V</i>		D.	ATE				
	WO	2006	 1152	 99		A1	_	2006	1102		WO 2	006-	JP30:	 9137		2	0060	425
		W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	ΚE,	KG,	KM,	KN,	KP,	KR,	KΖ,
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,
			NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,
			SK,	SL,	SM,	SY,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,
			YU,	ZA,	ZM,	ZW												
		RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KZ,	MD,	RU,	TJ,	TM										
	JΡ	2006	3326	22		Α		2006	1207	1	JP 2	006-	1195	68		2	0060	424
	EP	1874	893			A1		2008	0109		EP 2	006-	7459	87		2	0060	425
		R:	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
	US	2009	0039	768		A1		2009	0212		US 2	007-	9124	70		2	0071	024
PRIO	RIT	Y APP	LN.	INFO	. :						JP 2	005-	1267	33	2	A 2	0050	425
										,	WO 2	006-	JP309	9137	Ī	W 2	0060	425
	~					~										_		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 145:480097

- AB Organic electroluminescent devices are described which comprise a pair of electrodes; and at least one organic compound layer including a light emitting layer between the pair of electrodes, where the light emitting layer contains a host material and a light emitting material, and where the host material contains a metal complex having a tridentate or more ligand.

 IT 913699-16-8 913699-17-9
 - RL: DEV (Device component use); PRP (Properties); USES (Uses)
 (organic electroluminescent devices employing metal complex having
 multidentate ligand as host material)
- RN 913699-16-8 CAPLUS
- CN Platinum, [(diphenylmethylene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

RN 913699-17-9 CAPLUS CN Platinum, bis[μ -[([2,2'-bipyridine]-6,6'-diyl- κ N1: κ N1')bis(3,5-difluoro-2,1-phenylene- κ C)]]di- (9CI) (CA INDEX NAME)

IT 913699-15-7P

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

RN 913699-15-7 CAPLUS

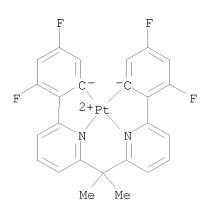
CN Palladium, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

IT 864541-08-2

RL: RCT (Reactant); RACT (Reactant or reagent)
(organic electroluminescent devices employing metal complex having
multidentate ligand prepared using)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 74 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:706549 CAPLUS

DOCUMENT NUMBER: 145:155758

TITLE: Organic electroluminescent devices having metal complexes and host materials in emitter layers

INVENTOR(S): Tsukahara, Jiro; Ise, Toshihiro; Uchida, Osamu;

Nakamura, Akio

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2006190718 A 20060720 JP 2004-382034 20041228 PRIORITY APPLN. INFO.: JP 2004-382034 20041228

OTHER SOURCE(S): MARPAT 145:155758

AB The devices have planar 4-coordinate metal complexes and host materials composed of nuclear components and ligands chosen from N-containing heterocyclic groups, cyano groups, and isocyano groups for coordination with the metal complexes in emitter layers between pairs of electrodes. The devices emit light with maximum wavelength ≤500 nm.

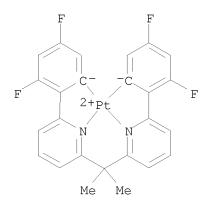
IT 864541-08-2

RL: DEV (Device component use); USES (Uses)

(organic electroluminescent devices having metal complexes and host materials in emitter layers)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 75 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:604017 CAPLUS

DOCUMENT NUMBER: 145:73027

TITLE: Organic electroluminescent device

INVENTOR(S):
Okada, Hisashi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 164 pp. CODEN: JKXXAF

CODEN: JKXX

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006165526	A	20060622	JP 2005-325122	20051109
US 20060222887	A1	20061005	US 2005-269816	20051109
US 7754346	B2	20100713		
PRIORITY APPLN. INFO.:			JP 2004-326225 A	20041110
ASSIGNMENT HISTORY FOR	US PATEN	T AVAILABLE	IN LSUS DISPLAY FORMAT	
OTHER SOURCE(S):	MARPAT	145:73027		

AB The invention relates to an organic electroluminescent device, providing a low voltage operation, enhanced luminescent characteristics, and good durability, comprising an organic layer, including an active layer, formed between a pair of electrodes, wherein the active layer comprises a

phosphorescent metal complex with a tri- or higher dentate ligand doped in ≥ 2 host compds.

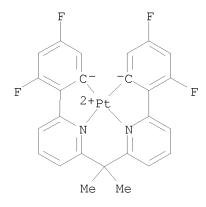
864541-08-2 ΤТ

RL: DEV (Device component use); MOA (Modifier or additive use); USES

(organic electroluminescent device)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

ANSWER 76 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN 1.8

2006:603049 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 145:73023

TITLE: Organic electroluminescence device and production

method

INVENTOR(S): Yamazaki, Kazuki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 161 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006164948	A	20060622	JP 2005-268950	20050915
PRIORITY APPLN. INFO.:			JP 2004-329415 A	20041112
OTHER COURCE (C).	MADDAT	1/5.73023		

OTHER SOURCE(S): MARPAT 145:73023

AΒ The invention refers to an organic electroluminescence device comprising an organic layer between two electrodes, wherein the organic layer is formed by vapor deposition of a metal complex with a tri- or higher dentate ligand, and the vapor deposition process is repeated at least twice without switching the metal complex.

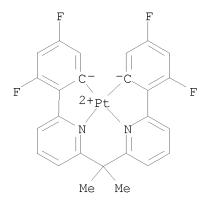
864541-08-2 ΙT

RL: DEV (Device component use); USES (Uses)

(organic electroluminescence device and production method)

RN 864541-08-2 CAPLUS

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-CN difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 77 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:516257 CAPLUS

DOCUMENT NUMBER: 145:36978

TITLE: Organic electroluminescent devices containing metal

complexes having more than tridentate ligands

INVENTOR(S):
Ogasawara, Atsushi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 152 pp.

CODEN: JKXXAF

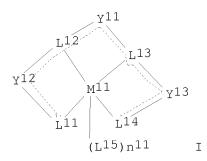
DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006140219 US 20060141285 PRIORITY APPLN. INFO.: ASSIGNMENT HISTORY FOR OTHER SOURCE(S):		20060601 20060629 T AVAILABLE 145:36978	JP 2004-326658 US 2005-269698 JP 2004-326658 A IN LSUS DISPLAY FORMAT	20011110

GΙ



The devices have organic layers including emitting layers and contain metal complexes having ≥ 3 -dentate ligands and SiR11R12R13R14 [R11-R14 = H, substituent, including (hetero)aryl group] in one or more of the organic layers. The complexes may be represented by I [M11 = metal; L11-L15 = ligand; Y11-Y13 = bridging group, single bond, double bond; n11 = 0-4]. The devices exhibit high luminance and longer half life of the same.

10/578,039

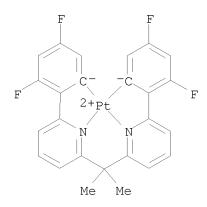
ΤТ 864541-08-2

RL: DEV (Device component use); USES (Uses)

(organic electroluminescent devices containing metal complexes having more-than-tridentate ligands and substituted silane compds.)

864541-08-2 CAPLUS RN

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-CN difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



ANSWER 78 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:516156 CAPLUS

DOCUMENT NUMBER: 145:17464

Vapor phase deposition of organic layers of organic EL TITLE:

device, organic EL device containing the layers, and

manufacture of the organic EL device

INVENTOR(S): Yamazaki, Kazuki

Fuji Photo Film Co., Ltd., Japan PATENT ASSIGNEE(S): SOURCE:

Jpn. Kokai Tokkyo Koho, 149 pp.

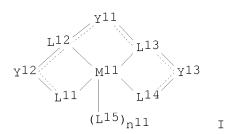
CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006140059	А	20060601	JP 2004-329416	20041112
PRIORITY APPLN. INFO.:			JP 2004-329416	20041112
OTHER SOURCE(S):	MARPAT	145:17464		
GI				



AB In the preparation of organic layers of organic EL device containing ≥ 1 organic

layers between a pair of electrodes, the process involves (i) degassing of evaporative materials containing ≥ 1 metal complexes with ≥ 3 ligands and (ii) heating of the evaporative materials and their deposition. Preferably, the metal complexes are represented by the general formula I (M11 = metal ion, preferably ion of Pt, Ir, Re, Pd, Rh, Ru, or Cu; L11-L15 = ligands which coordinate with M11; no more atom. groups exist in L11-L14 to form cyclic ligands; L15 will not bond with L11 and L14 both to form cyclic ligand; Y11-Y13 = linking group, single bond, double bond; when Y11, Y12, or Y13 are linking group, L11 and Y12, Y12 and L12, L12 and Y11, Y11 and L13, L13 and Y13, and Y13 and L14 show single bond or double bond independently; n11 = 0-4).

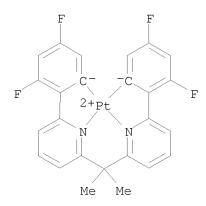
IT 864541-08-2

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(degassing and vapor phase deposition of metal complexes for preparation of organic layers of EL device)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 79 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:469966 CAPLUS

DOCUMENT NUMBER: 144:477361

TITLE: Organic electroluminescent device with high driving

durability and defined ionization potential

relationship among hole-transport and luminescent

layers

INVENTOR(S):
Kitamura, Yoshitaka

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 123 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

OTHER SOURCE(S):

US 20060105202 20060518 US 2005-272763 A 1 20051115 JP 2006173588 20060629 JP 2005-333096 20051117 Α PRIORITY APPLN. INFO.: A 20041117 JP 2004-333263 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT MARPAT 144:477361

A first aspect of the invention is an organic electroluminescent device that includes a plurality of organic compound layers between a pair of electrodes. The plurality of organic compound layers include a luminescent layer and two or more hole-transporting layers. The hole-transporting layers include a layer adjacent to the luminescent layer. The luminescent layer contains a host material and a luminescent material. The luminescent material is a metal complex containing a tri- or higher-dentate ligand. When the ionization potential of the luminescent layer is designated as Ip0, the ionization potential of the hole-transporting layer adjacent to the luminescent layer among the hole-transporting layers is designated as Ip1, and the ionization potential of the n-th hole-transporting layer from the luminescent layer among the hole-transporting layers is designated as IPn, these values satisfy the relationship represented by the following formula (1). In formula (1) n is an integer of 2 or more. Ip0>Ip1>Ip2> . . . >Ipn-1>Ipn formula (1). Thus, if the durability (defined as the time t0.5 necessary for a decrease in luminance from an initial value of 300 cd/m2 to 150 cd/m2) of the comparative device comprising ITO (0.5 mm)/NPD hole-transport layer (40 nm)/mCP (95% by weight) + BPM-1 (5% by weight) luminescent layer [35 nm; where mCP = m-dicarbazolylbenzene, BPM-1 = [2,2-bis[6-(4,6-difluorophenyl- κ -C2)-2pyridyl]propane]platinum(II)]/BAlq electron-transporting layer (45 nm)/Al cathode (100 nm) is defined as standard, then the device of the invention comprising CuPc 1st hole-transport layer (10 nm)/NPD 2nd hole-transport layer (25 nm)/HTM-1 3rd hole-transport layer [5 nm, where HTM-1 =diphenylbis[4-(tribenzazepinyl)phenyl]silane]//mCP (95% by weight) + BPM-1 (5% by weight) luminescent layer (35 nm)/BAlq 1st electron-transport layer (5 nm)/Alq 2nd electron-transport layer (40 nm) exhibited a durability relative to the standard of \geq 3.5.

ΤТ 808111-97-9 864541-08-2

> RL: DEV (Device component use); MOA (Modifier or additive use); PRP (Properties); USES (Uses)

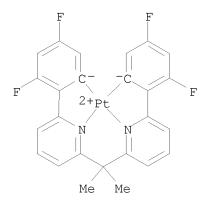
(dopant in mixed luminescent layer; organic electroluminescent device with high driving durability and defined ionization potential relationship among hole-transport and luminescent layers)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

864541-08-2 CAPLUS RN

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-CN difluoro-2,1-phenylene-κC)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L8 ANSWER 80 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:446105 CAPLUS

DOCUMENT NUMBER: 144:442426

TITLE: Organic electroluminescent devices employing

heterocyclic compounds and metal complexes with

multidentate ligands

INVENTOR(S):
Ogasawara, Jun

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 113 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060099450 JP 2006140218	A1 A	20060511 20060601	US 2005-268650 JP 2004-326657	20051108 20041110
PRIORITY APPLN. INFO.:			000- 0-000	20041110
ASSIGNMENT HISTORY FOR V	JS PATEN	IT AVAILABLE	IN LSUS DISPLAY FORMAT	
OTHER SOURCE(S):	MARPAT	144:442426		
AB Organic electrolum.	inescent	devices cor	mprising ≥1 organic lay	er between

AB Organic electroluminescent devices comprising ≥1 organic layer between a pair of electrodes are described in which the organic layers include a luminescent layer, ≥1 of the organic layers comprises ≥1 metal complex containing a tri- or higher-dentate ligand, and a compound having a heterocyclic skeleton containing ≥2 heteroatoms is contained in the organic layer containing the metal complex and/or in other organic layer(s). IT 864541-08-2

RL: DEV (Device component use); USES (Uses)

(organic electroluminescent devices employing heterocyclic compds. and metal complexes with multidentate ligands)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

L8 ANSWER 81 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:446045 CAPLUS

DOCUMENT NUMBER: 144:442422

TITLE: Organic electroluminescent devices using metal

complexes with multidentate ligands for enhancing

singlet exciton generation

INVENTOR(S):
Igarashi, Tatsuya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 117 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
	US 20060099451	A1	20060511	US 2005-269809		20051109
	JP 2006140182	A	20060601	JP 2004-326053		20041110
PRIOF	RITY APPLN. INFO.:			JP 2004-326053	Α	20041110
		~			_	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 144:442422

AB Organic electroluminescent devices comprising ≥1 organic compound layer containing a luminescent layer between a pair of electrodes are described in which the luminescent layer contains an electrofluorescent compound, the emission when voltage is applied being mainly derived from the fluorescent compound, and the luminescent layer further comprises an amplifying agent functioning to increase the number of singlet excitons generated and thus amplifying the light intensity when voltage is applied, the amplifying agent being a metal complex having a tridentate or higher dentate ligand.

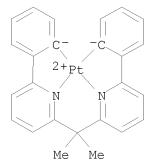
IT 808111-97-9 864541-08-2

RL: DEV (Device component use); USES (Uses)

(organic electroluminescent devices using metal complexes with multidentate ligands for enhancing singlet exciton generation)

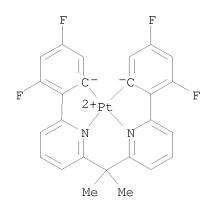
RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)



RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



L8 ANSWER 82 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:322757 CAPLUS

DOCUMENT NUMBER: 144:380339

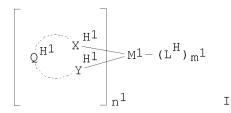
TITLE: Organic electroluminescent devices INVENTOR(S): Yamazaki, Kazuki; Mishima, Masayuki PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 109 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006093197	A	20060406	JP 2004-273203	20040921
JP 2010267974	A	20101125	JP 2010-126827	20100602
PRIORITY APPLN. INFO.:			JP 2004-273203 A3	20040921
OTHER SOURCE(S):	MARPAT	144:380339		
GI				



AB The devices contain light-emitting materials and host materials in the electroluminescent layers between a pair of electrodes. The light-emitting materials are metal complexes which have ≥ 3 -position ligands, and the host materials are also metal complexes (I).

IT 808111-97-9 864541-08-2

RL: DEV (Device component use); USES (Uses)

(light-emitting material; organic electroluminescent devices containing metal

complexes and host materials in light-emitting materials)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)

L8

ACCESSION NUMBER: 2006:319697 CAPLUS

DOCUMENT NUMBER: 144:378696

TITLE: Light-emitting device employing a platinum complex

with a quadridentate nitrogen-containing heterocyclic

ligand

INVENTOR(S): Ise, Toshihiro; Sano, Satoshi; Igarashi, Tatsuya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation

SOURCE: U.S. Pat. Appl. Publ., 44 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
					_	
	US 20060073359	A1	20060406	US 2005-234141		20050926
	US 7732606	В2	20100608			
	JP 2006093542	A	20060406	JP 2004-279153		20040927
	JP 4531509	B2	20100825			
	US 20090309490	A1	20091217	US 2009-395542		20090227
	JP 2010161368	A	20100722	JP 2010-2388		20100107
PRIO	RITY APPLN. INFO.:			JP 2004-279153	Α	20040927
				US 2005-234141	Α3	20050926

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 144:378696

GΙ

$$\mathbb{R}^{1}$$
 \mathbb{R}^{2}
 \mathbb{R}^{2}
 \mathbb{R}^{3}
 \mathbb{R}^{4}

AB Organic electroluminescent devices are described which comprise a pair of electrodes and at least one organic layer including a light-emitting layer interposed between the pair of electrodes, wherein the organic layer contains at least one platinum complex compound having a quadridentate ligand containing a partial structure represented by formula (I), where Z1 represents a nitrogen-containing heterocycle coordinated to the platinum through a nitrogen atom; L1 represents a single bond or a linking group; R1, R3 and R4 each independently represent a hydrogen atom or a substituent; and R2 represents a substituent.

IT 881887-26-9P

RL: DEV (Device component use); MOA (Modifier or additive use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses) (light-emitting device employing platinum complex with quadridentate nitrogen-containing heterocyclic ligand)

RN 881887-26-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(4-cyano-2,1-phenylene- κ C1)]]-, (SP-4-2)- (CA INDEX NAME)

IT 881887-27-0P 881887-28-1P 881887-29-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (light-emitting device employing platinum complex with quadridentate nitrogen-containing heterocyclic ligand)
RN 881887-27-0 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-(3-nitrophenyl)pyridinato]](2-)]- (9CI) (CA INDEX NAME)

RN 881887-28-1 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-[3-(trifluoromethyl)phenyl]pyridinato]](2-)]- (9CI) (CA INDEX NAME)

RN 881887-29-2 CAPLUS

CN Platinum, [[2,2'-(1-methylethylidene)bis[6-(3-fluorophenyl)pyridinato]](2-)]- (9CI) (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 84 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

2006:298895 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 144:340470

TITLE: Organic electroluminescent devices with multiple

emitter-doped active layers including complexes with

tridentate and polydentate ligands

INVENTOR(S): Kitamura, Yoshitaka; Mishima, Masayuki

Fuji Photo Film Co., Ltd., Japan PATENT ASSIGNEE(S): SOURCE: U.S. Pat. Appl. Publ., 50 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060068222	A1	20060330	US 2005-234273	20050926
JP 2006121032	A	20060511	JP 2005-83458	20050323
RIORITY APPLN. INFO.:			JP 2004-279563 A	20040927
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT MARPAT 144:340470

OTHER SOURCE(S):

Organic electroluminescent devices having an anode, a cathode, and ≥ 1 organic compound layer between the anode and the cathode, with ≥ 1 of the ≥1 organic compound layers being an organic luminescent layer, are described in which the organic luminescent layer contains ≥1 host material and ≥ 2 luminescent materials, ≥ 1 of the luminescent materials being a metal complex having a tridentate or higher polydentate chain ligand.

808111-97-9 ΙT 864541-08-2

RL: DEV (Device component use); MOA (Modifier or additive use); USES

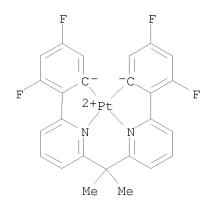
(organic electroluminescent devices with multiple emitter-doped active layers including complexes with tridentate and polydentate ligands)

RN 808111-97-9 CAPLUS

Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 85 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:97819 CAPLUS

DOCUMENT NUMBER: 144:180483

TITLE: Organic electroluminescence device INVENTOR(S): Ise, Toshihiro; Igarashi, Tatsuya

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation

SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006032758	A	20060202	JP 2004-211236	20040720
JP 4484611	В2	20100616		

PRIORITY APPLN. INFO.: JP 2004-211236 20040720

AB The invention refers to an organic electroluminescence device comprising a metal complex containing a metal from the 5 period or 6 period, and from the 5th to 11th Group, or a rare earth metal complex.

IT 874743-10-9

RL: DEV (Device component use); USES (Uses)

CN

(organic electroluminescence device comprising metal complex)

RN 874743-10-9 CAPLUS

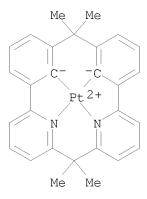
Platinum, (7,7,18,18-tetramethyl-23,24-

diazapentacyclo[17.3.1.12,6.18,12.113,17]hexacosa-

1(23),2,4,6(26),8,10,12(25),13,15,17(24),19,21-dodecaene-25,26-diyl-

 κ C25, κ C26, κ N23, κ N24)-, (SP-4-2)- (9CI) (CA INDEX

NAME)



L8 ANSWER 86 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:1004221 CAPLUS

DOCUMENT NUMBER: 143:315141

TITLE: Organic light-emitting devices with light-emitting

layers containing an electrically inactive compound

INVENTOR(S): Mishima, Masayuki; Ogasawara, Jun

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation

SOURCE: U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				_	
US 20050202278	A1	20050915	US 2005-66195		20050225
US 7422800	В2	20080909			
JP 2005294250	A	20051020	JP 2005-21268		20050128
JP 4352008	В2	20091028			
PRIORITY APPLN. INFO.:			JP 2004-66781	Α	20040310
			JP 2005-21268	Α	20050128

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 143:315141

AB Organic electroluminescent devices which comprise an organic compound layer structure containing ≥ 1 light-emitting layer are described in which the light-emitting layer contains a light-emitting material and an elec. inactive organic compound capable of being subjected to dry film formation and having an energy difference between its HOMO and LUMO of ≥ 4.0 eV. The light-emitting layer may comprise a phosphorescent material, especially an orthometalated metal complex or a porphyrin metal complex.

IT 864541-08-2

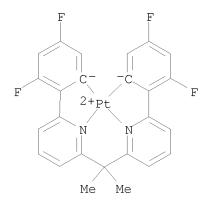
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(organic electroluminescent devices with light-emitting layers containing an

elec. inactive compound)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 87 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:1004220 CAPLUS

DOCUMENT NUMBER: 143:315140

TITLE: Organic light-emitting device with hole transport

layers containing an electrically inactive compound

INVENTOR(S): Mishima, Masayuki; Ogasawara, Jun

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation

SOURCE: U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	KIND DATE APPLICATION NO.						
US 20050202277	A1	20050915	US 2005-65478		20050225			
US 7422799	В2	20080909						
JP 2005294249	A	20051020	JP 2005-21267		20050128			
PRIORITY APPLN. INFO.:			JP 2004-66777	Α	20040310			
			JP 2005-21267	А	20050128			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 143:315140

AB Organic electroluminescent devices which comprise an organic compound layer containing

a hole transport layer, a light-emitting layer, and an electron transport layer between a pair of electrodes are described in which the hole transport layer contains a hole-transporting material and an elec. inactive organic compound capable of being subjected to dry film formation and having an energy difference between its HOMO and LUMO of ≥ 4.0 eV. The light-emitting layer may comprise a phosphorescent material, especially an orthometalated metal complex or a porphyrin metal complex. The hole transport layer may have a multilayered structure comprising a first hole transport layer comprising a first hole-transporting material; and a

second hole transport layer comprising a second hole-transporting material and the elec. inactive organic compound

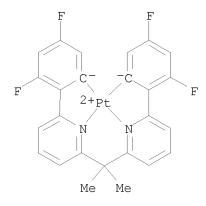
IT 864541-08-2

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(organic electroluminescent devices with hole transport layers containing an elec. inactive organic compound)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 88 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:1004219 CAPLUS

DOCUMENT NUMBER: 143:315139

TITLE: Organic light emitting devices using electrically

inactive materials

INVENTOR(S): Mishima, Masayuki; Ogasawara, Jun

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation

SOURCE: U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	DATE APPLICATION NO.					
US 20050202	276 A1	20050915	US 2005-65440	20050225				
US 7635946	B2	20091222						
JP 20052942	48 A	20051020	JP 2005-21266	20050128				
PRIORITY APPLN.	INFO.:		JP 2004-66779	A 20040310				
			JP 2005-21266	A 20050128				

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 143:315139

AB Organic electroluminescent devices which comprise an organic compound layer containing

a hole transport layer, a light-emitting layer, a blocking layer, and an electron transport layer between a pair of electrodes are described in which the blocking layer contains an electron transport material and an elec. inactive organic compound capable of being subjected to dry film formation and having an energy difference between its HOMO and LUMO of

 ≥ 4.0 eV. The light-emitting layer may comprise a phosphorescent material, especially an orthometalated metal complex or a porphyrin metal complex.

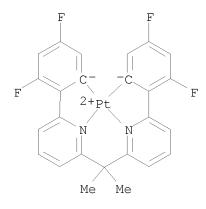
IT 864541-08-2

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(organic electroluminescent devices with blocking layers containing an electron transport material and an elec. inactive organic compound)

RN 864541-08-2 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)(3,5-difluoro-2,1-phenylene- κ C)]]-, (SP-4-2)- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 89 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2005:409536 CAPLUS

DOCUMENT NUMBER: 142:447304

TITLE: Preparation of cyclometalated metal complexes with

bipodal ligands

INVENTOR(S): Stoessel, Philipp; Gerhard, Anja

PATENT ASSIGNEE(S): Covion Organic Semiconductors G.m.b.H., Germany

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

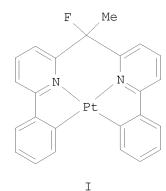
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATI	ON NO. D	ATE		
WO 2005042550	A1 2005(0512 WO 2004-E	P11890 2	20041021		
W: AE, AG, AL,	AM, AT, AU,	AZ, BA, BB, BG,	BR, BW, BY, BZ,	CA, CH,		
CN, CO, CR,	CU, CZ, DE,	DK, DM, DZ, EC,	EE, EG, ES, FI,	GB, GD,		
GE, GH, GM,	HR, HU, ID,	IL, IN, IS, JP,	KE, KG, KP, KR,	KZ, LC,		
LK, LR, LS,	LT, LU, LV,	MA, MD, MG, MK,	MN, MW, MX, MZ,	NA, NI,		
NO, NZ, OM,	PG, PH, PL,	PT, RO, RU, SC,	SD, SE, SG, SK,	SL, SY,		
TJ, TM, TN,	TR, TT, TZ,	UA, UG, US, UZ,	VC, VN, YU, ZA,	ZM, ZW		
RW: BW, GH, GM,	KE, LS, MW,	MZ, NA, SD, SL,	SZ, TZ, UG, ZM,	ZW, AM,		
AZ, BY, KG,	KZ, MD, RU,	TJ, TM, AT, BE,	BG, CH, CY, CZ,	DE, DK,		
EE, ES, FI,	FR, GB, GR,	HU, IE, IT, LU,	MC, NL, PL, PT,	RO, SE,		
SI, SK, TR,	BF, BJ, CF,	CG, CI, CM, GA,	GN, GQ, GW, ML,	MR, NE,		
SN, TD, TG						
DE 10350722	A1 20050	0525 DE 2003-1	0350722 2	0031030		

EP	1678	190			A1	20060712 EP 2004-790697								20041021			
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK				
CN	1894	269			Α		2007	0110	(CN 2	2004-	8003	1488		2	0041	021
JP	2007	5196	14		Τ		2007	0719		JP 2	2006-	5371	37		2	0041	021
KR	2006	1114	56		A		2006	1027		KR 2	2006-	7008	085		2	0060	426
US	2007	0082	284		A1		2007	0412	1	US 2	2006-	5780	39		2	0060	501
PRIORIT	Y APP	LN.	INFO	.:						DE 2	2003-	1035	0722	Z	A 2	0031	030
									1	WO 2	2004-	EP11	890	Ī	√ 2	0041	021

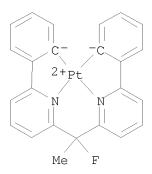
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 142:447304; MARPAT 142:447304 GI



AB The invention relates to novel metal complexes with bipolar ligands. Thus, cyclometalation reaction of 1,1-bis(6-phenyl-2-pyridyl)-1-fluoroethane (preparation given) with cis-dimethyldi(η 1-S-dimethylsulfoxidyl)platinum(II) in PhMe at 90° for 3h gave 94% title complex I. Such compds. are of application as functional materials in a range of different applications, associated with the widest sense of the electronic industry. IT 851231-11-3P

851231-11-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of cyclometalated metal complexes with bipodal ligands useful in electronic industry)

RN 851231-11-3 CAPLUS CN Platinum, [(1-fluoroethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (9CI) (CA INDEX NAME)



(9 CITINGS)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 90 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN L8

2005:409442 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 142:472295

Platinum complex as luminescent material in organic TITLE:

electroluminescent devices

Itoh, Hisanori; Nakayama, Yuji; Iwata, Takeshi; INVENTOR(S):

Matsushima, Yoshimasa; Hori, Yoji

PATENT ASSIGNEE(S): Takasago International Corporation, Japan

SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

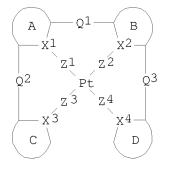
PATENT INFORMATION:

PATENT NO.					DATE			APP	LICAT	ION	NO.		DATE		
-								WO	2004-	 JP15	889		2	0041	027
AE, CN, GE, LK, NO, TJ, BW, AZ, EE,	AG, CO, GH, LR, NZ, TM, GH, BY,	AL, CR, GM, LS, OM, TN, GM, KG,	AM, CU, HR, LT, PG, TR, KE, KZ,	AT, CZ, HU, LU, PH, TT, LS, MD, GB,	AU, DE, ID, LV, PL, TZ, MW, RU, GR,	AZ, DK, IL, MA, PT, UA, MZ, TJ,	DM, IN, MD, RO, UG, NA, TM, IE,	DZ IS MG RU US SD AT IT	, EC, , JP, , MK, , SC, , UZ, , SL, , BE, , LU,	EE, KE, MN, SD, VC, SZ, BG, MC,	EG, KG, MW, SE, VN, TZ, CH, NL,	ES, KP, MX, SG, YU, UG, CY, PL,	FI, KR, MZ, SK, ZA, ZM, CZ, PT,	GB, KZ, NA, SL, ZM, ZW, DE, RO,	GD, LC, NI, SY, ZW AM, DK, SE,
SN,	TD,	TG	A2	·	2006	0726	·	EP	2004-	8174	19	·	2	0041	027
												NL,	SE,	MC,	PT,
								CN	2004-	8003	1799		2	0041	027
								JP 2005-515131							
KR 2006115371 US 20070103060					2007	0510	US 2006-578237								
			BZ		2008	1028									
	AE, CN, GE, NO, TJ, SN, SN, SN, SN, SN, SN, 3804 AT, EE, 5026 544529 0173 540 51153 70103 2797 PLN.	AE, AG, CN, CO, GE, GH, LK, LR, NO, NZ, TJ, TM, EW, GH, AZ, BY, EE, ES, SI, SK, SN, TD, 3804 AT, BE, IE, SI, 5026 445294 0173 640 6115371 70103060 2797 PLN. INFO	AE, AG, AL, CN, CO, CR, GE, GH, GM, LK, LR, LS, NO, NZ, OM, TJ, TM, TN, E BW, GH, GM, AZ, BY, KG, EE, ES, FI, SI, SK, TR, SN, TD, TG 3804 AT, BE, CH, IE, SI, FI, 5026 445294 0173 040 05115371 70103060 02797 PLN. INFO::	AE, AG, AL, AM, CN, CO, CR, CU, GE, GH, GM, HR, LK, LR, LS, LT, NO, NZ, OM, PG, TJ, TM, TN, TR, BW, GH, GM, KE, AZ, BY, KG, KZ, EE, ES, FI, FR, SI, SK, TR, BF, SN, TD, TG 3804 AT, BE, CH, DE, 1E, SI, FI, RO, 5026 445294 C173 640 65115371 A70103060 A1 2797 B2 PLN. 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INFO.: DAMACTOR OF TOWN, DAY B2 20081028 PLN. INFO.: JP WO	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, SN, TD, TG A 20060726 EP 2004-AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, CO26 A 20061206 CN 2004-AT, B2 20080702 JP 2005-AT, B2 20081028 PLN. INFO.: JP 2003-AT, CO204-AT, CO20	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, SN, TD, TG AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, CO26 A 20061206 A 20081224 D173 B2 20080702 D1 2005-5151 A 20061108 B 20091101 TW 2004-1333 AC 20081028 PLN. INFO.: JP 2003-3748 WO 2004-JP15	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, EBW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, SN, TD, TG AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK 20061206 A 20061206 A 20061206 CN 2004-80031799 A45294 C 20081224 D173 B2 20080702 JP 2005-515131 B3 20091101 TW 2004-133313 A 20061108 KR 2006-7008160 A1 20070510 B2 2008-7028 PLN. 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INFO.: JP 2003-374861 WO 2004-JP15889	AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, SN, TD, TG AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK C026 A 20061206 A 20061206 CN 2004-80031799 A 20061206 CN 2004-80031799 CN 2004-8004-8004-8004-8004-8004-8004-8004-	AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, EBW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, SN, TD, TG B804 A2 20060726 A2 20060726 A2 20060726 A3 20061206 CN CN CN CN CN CN CN CN CN C

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 142:472295

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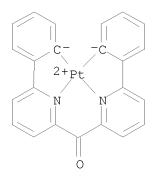
AΒ The invention relates to a novel platinum complex useful as a material for luminescent devices satisfactory in luminescent properties and luminescent efficiency; and a novel luminescent material utilizable in various fields. The platinum complex is represented by the general formula I, where any two of rings A, B, C, and D each represents an optionally substituted nitrogenous heterocycle and the remaining two each represents an optionally substituted aryl or heteroaryl ring, provided that rings A and B, rings A and C, or/and rings B and D may form a fused ring; any two of X1, X2, X3, and X4 each represents a nitrogen atom coordinating to the platinum atom and the remaining two each represents carbon or nitrogen; Q1, Q2, and Q3 each represents a bond, oxygen, sulfur, or a divalent group; and any two of Z1, Z2, Z3, and Z4 each represents a coordinate bond and the remaining two each represents a covalent bond, oxygen, or sulfur. The invention also relates to a luminescent device employing this platinum complex.

IT 851605-11-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (platinum complex as luminescent material in organic electroluminescent devices)

RN 851605-11-3 CAPLUS

CN Platinum, [carbonylbis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD

(14 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 91 OF 91 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2004:1080997 CAPLUS

DOCUMENT NUMBER: 142:65002

TITLE: Organic electroluminescent devices and metal complex

compounds

KIND DATE

INVENTOR(S): Nii, Kazumi; Watanabe, Kousuke; Igarashi, Tatsuya;

> Ichijima, Seiji; Ise, Toshihiro Fuji Photo Film Co., Ltd., Japan

> > ADDITCATION NO

DATE

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 142 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DATENT NO

PATENT NO.					KIN	D	DATE			APP	LICAT	ION	NO.		DATE 				
WO	2004 W:	AE, CN, GE, LK, NO, TJ, BW, AZ, EE,	AG, CO, GH, LR, NZ, TM, GH, BY, ES,	AL, CR, GM, LS, OM, TN, GM, KG,	CU, HR, LT, PG, TR, KE, KZ, FR,	AT, CZ, HU, LU, PH, TT, LS, MD, GB,	DE, ID, LV, PL, TZ, MW, RU, GR,	AZ, DK, IL, MA, PT, UA, MZ, TJ,	BA, DM, IN, MD, RO, UG, NA, TM, IE,	BB DZ IS MG RU US SD AT	2004- , BG, , EC, , JP, , MK, , SC, , UZ, , SL, , BE,	BR, EE, KE, MN, SD, VC, SZ, BG, MC,	BW, EG, KG, MW, SE, VN, TZ, CH, NL,	ES, KP, MX, SG, YU, UG, CY, PL,	BZ FI KR MZ SK ZA ZM CZ PT	, GB, , KZ, , NA, , SL, , ZM, , ZW, , DE, , RO,	CH, GD, LC, NI, SY, ZW AM, DK, SE,		
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	2010				A		2010			-	2009-					20091			
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OTHER SOURCE(S): MARPAT 142:65002

Organic electroluminescent devices which have a pair of electrodes and ≥1 organic layer including a luminescent layer between the pair of electrodes are described in which ≥1 layer between the pair of electrodes comprises ≥1 metal complex having a tridentate- or higher polydentate-chain structure ligand. Preferably, the metal ion in the metal complex is selected from platinum, iridium, rhenium, palladium, rhodium, ruthenium and copper ions. Selected groups of platinum complexes are also described.

ΙT 808111-97-9

RL: DEV (Device component use); MOA (Modifier or additive use); USES

(organic electroluminescent devices using metal-polydentate ligand

complexes)

RN 808111-97-9 CAPLUS

CN Platinum, [(1-methylethylidene)bis[(6,2-pyridinediyl- κ N)-2,1-phenylene- κ C]]-, (SP-4-2)- (CA INDEX NAME)

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS

RECORD (20 CITINGS)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 11:35:32 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 11:35:54 ON 03 MAR 2011

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 25 S L1 FULL

FILE 'CAPLUS' ENTERED AT 11:36:38 ON 03 MAR 2011

L4 9 S L3

FILE 'REGISTRY' ENTERED AT 11:37:57 ON 03 MAR 2011

L5 STRUCTURE UPLOADED

L6 1 S L5

L7 54 S L5 FULL

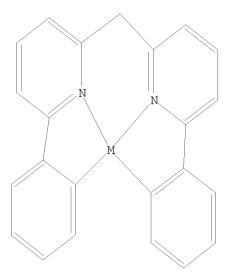
FILE 'CAPLUS' ENTERED AT 11:39:16 ON 03 MAR 2011

L8 91 S L7

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L5 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.

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